

CALIFORNIA COASTAL COMMISSION

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Staff: Christine Chestnut-SF
Staff Report: June 28, 2006
Hearing Date: July 13, 2006

STAFF REPORT AND FINDINGS FOR CONSENT RESTORATION ORDER AND HEARING FOR NOTICE OF VIOLATION OF THE COASTAL ACT

CONSENT RESTORATION ORDER: CCC-06-RO-03

NOTICE OF VIOLATION CCC-06-NOV-02

RELATED VIOLATION FILE: V-5-05-031

PROPERTY LOCATION: Northern Terminus of Driftwood Drive, Laguna Beach, Orange County (APN 056-240-65)
(Exhibit 1)

DESCRIPTION OF PROPERTY: 65-acre parcel in South Laguna Beach located between residential development and the first ridge landward of the ocean

PROPERTY OWNER: Driftwood Properties LLC

AGENT: Athens Development AC, LLC
(aka The Athens Group)

PERSONS SUBJECT TO THIS ORDER: Driftwood Properties, LLC; Athens Development AC, LLC

VIOLATION DESCRIPTION: Removal of major vegetation, including 1341 square feet of threatened Big-leaved Crownbeard

SUBSTANTIVE FILE DOCUMENTS:

1. Restoration Order CCC-05-RO-06 file;
2. Exhibits 1 through 8.

CEQA STATUS: Exempt (CEQA Guidelines (CG) §§ 15060(c)(2)), 15060(c)(3) and Categorically Exempt (CG §§ 15061(b)(2), 15037, 15038, and 15321).

I. SUMMARY OF STAFF RECOMMENDATION

Staff recommends that the Commission approve Consent Restoration Order CCC-06-RO-03 (“Consent Order”), addressing the unpermitted removal of major vegetation including Big-leaved Crownbeard (*Verbesina dissita*, hereinafter referred to as “Crownbeard”), a state and federally listed threatened species, in violation of the Coastal Act. The violation occurred on property owned by Driftwood Properties, LLC (“Driftwood”) located at the northern terminus of Driftwood Drive in Laguna Beach in Orange County (APN 056-240-65) (“the property”). Athens Development AC, LLC (also known as “The Athens Group” and hereinafter referred to as “Athens”) has, in its capacity as an agent of Driftwood Properties, LLC, assumed responsibility for all restoration and mitigation activities to be conducted pursuant to the Consent Order. Staff has worked closely with Athens in this capacity, to reach an amicable agreement that reflects the rare and vulnerable nature of the affected resource, and the need not only to restore the Crownbeard that was removed, but also to plant additional Crownbeard and replace non-native vegetation with native chaparral, which provides a canopy that promotes Crownbeard growth, to mitigate for the interim losses to the Crownbeard.

The violation at issue in this matter consists of the unpermitted removal of major vegetation, including approximately 1341 square feet of Crownbeard, from an area in the southeastern region of the property. Crownbeard is an extremely rare, endemic species found only in two disjunct populations: southern Laguna Beach and northwestern Baja California, Mexico. Crownbeard is easily impacted by human activities and continually threatened by residential development and associated fuel modification activities. The Laguna Beach population, which contains the Crownbeard at issue in this matter, is estimated to contain only a few thousand plants. Approximately 80% of this small population is located on private lands and susceptible to residential development and fuel modification. These activities can result in removal of plants, and the edge effects and other impacts of habitat fragmentation caused by the removal can affect segments of the population that extend well beyond where the activities occur. Accordingly, the area of Crownbeard at issue in this matter constitutes an Environmentally Sensitive Habitat Area (ESHA) and is protected under Coastal Act Section 30240.

The property is located in the Hobo/Aliso area of Laguna Beach. The Commission has jurisdiction over permit and enforcement matters in this area because Hobo Canyon is an area of deferred certification and, therefore, is not subject to local regulation under the certified Laguna Beach Local Coastal Program.¹

¹ Under Chapter 9 of the Coastal Act, the Commission can take enforcement action in certified jurisdictions, subject to certain requirements.

Commission can issue a restoration order under section 30811 of the Coastal Act, if it finds that development 1) has occurred without a coastal development permit, 2) is inconsistent with Chapter 3 of the Coastal Act, and 3) is causing continuing resource damage. The removal constitutes development as defined in Coastal Act Section 30106 and was undertaken without a coastal development permit (CDP). This unpermitted development was inconsistent with Section 30240 of the Coastal Act, and will continue to cause “continuing resource damage”, as defined in the California Code of Regulations, Title 14, Section 13190, until closely-monitored restoration and the appropriate mitigation, as set forth in this Consent Order, is undertaken. Therefore, the Commission has the authority to issue a restoration order in this matter.

Accordingly, the Consent Order directs Driftwood and Athens to: 1) restore the approximately 1341 square feet of Crownbeard that was impacted in violation of the Coastal Act; 2) plant an additional 670 square feet of Crownbeard, to mitigate for the temporal loss and loss of fitness incurred by the impacted Crownbeard as a result of the Coastal Act violation; 3) remove non-native acacia and replace it with native southern maritime chaparral, which is the dominant community found in surrounding areas and provides canopy shading that is essential for Crownbeard growth; and 4) monitor the success of restoration and mitigation efforts and perform any necessary maintenance activities, such as weeding or planting container stock, to ensure that the restoration and mitigation goals of the Order are accomplished. In addition, as part of the Consent Order, a Notice of Violation of the Coastal Act will be recorded, pursuant to Coastal Act Section 30812 at the Orange County Recorder’s Office and will appear in the chain of title to protect potential purchasers of the property. Finally, under the terms of the proposed Consent Order, Athens will pay \$30,000 in Coastal Act penalties to the Violation Remediation Account.

II. RESTORATION HEARING PROCEDURES

The procedures for a hearing on a proposed Restoration Order are set forth in section 13195, incorporating by reference sections 13185 and 13186 of the California Code of Regulations (CCR), Title 14, Division 5.5, Chapter 5, and Subchapter 9. The Restoration Order hearing procedure is similar in most respects to the procedures that the Commission uses for permit and Local Coastal Program matters.

For a Restoration Order hearing, the Chair shall announce the matter and request that all alleged violators or their representatives present at the hearing identify themselves for the record, indicate what matters are already part of the record, and announce the rules of the proceeding including time limits for presentations. The Chair shall also announce the right of any speaker to propose to the Commission, before the close of the hearing, any question(s) for any Commissioner, in his or her discretion, to ask of any other speaker. The Commission staff shall then present the report and recommendation to the Commission, after which the alleged violator(s) or their representative(s) may present their position(s) with particular attention to those areas where an actual controversy exists. The Chair may then recognize other interested persons after which staff typically responds to the testimony and to any new evidence introduced.

The Commission will receive, consider, and evaluate evidence in accordance with the same standards it uses in its other quasi-judicial proceedings, as specified in 14 CCR section 13195,

incorporating by reference sections 13185, 13186 and 13065. The Chair will close the public hearing after the presentations are completed. The Commissioners may ask questions to any speaker at any time during the hearing or deliberations, including, if any Commissioner chooses, any questions proposed by any speaker in the manner noted above. Finally, the Commission shall determine, by a majority vote of those present and voting, whether to issue the Restoration Order, either in the form recommended by the Executive Director, or as amended by the Commission. Passage of a motion, per staff recommendation or as amended by the Commission, will result in issuance of the order.

III. STAFF RECOMMENDATION

A. Motion re: Restoration Order:

I move that the Commission issue Consent Restoration Order No. CCC-06-RO-03, pursuant to the staff recommendation.

B. Recommendation of Approval:

Staff recommends a **YES** vote. Passage of this motion will result in the issuance of Consent Restoration Order No. CCC-06-RO-03. The motion passes only by an affirmative vote of a majority of Commissioners present.

C. Resolution to Issue Consent Restoration Order:

The Commission hereby issues Consent Restoration Order number CCC-06-RO-03, as set forth below, and adopts the findings set forth below on the grounds that 1) Driftwood Properties, LLC has conducted development without a CDP, 2) the development is inconsistent with the Coastal Act, and 3) the development is causing continuing resource damage. Athens Development AC, LLC, also a signatory to this Consent Order, has agreed to undertake all restoration and mitigation activities required under the Consent Restoration Order on behalf of Driftwood Properties, LLC.

IV. FINDINGS FOR CONSENT RESTORATION ORDER CCC-06-RO-03

A. Description of Property

The property at issue is a 65-acre lot located at the northern terminus of Driftwood Drive in Laguna Beach in Orange County. The property contains large areas of dense, pristine southern maritime chaparral and approximately 15.4 acres of Crownbeard (**Exhibit 2 and 3**).² A watercourse extends across the eastern region of the property, terminating at a municipal water tank. Crownbeard inhabits the watercourse and adjacent areas.

² Letter to The Athens Group from Steve Nelson, PCR Services Corporation, dated November 2, 2005, at page 1. The letter includes a statement that the impacted Crownbeard represents .2% of the total amount of Crownbeard on the property. If approximately 1341 square feet was impacted, then the total amount of Crownbeard on the property is 15.4 acres. Letter is attached as **Exhibit 3**.

B. Description of Coastal Act Violation

The violation consists of the unpermitted removal of approximately 1341 square feet of Crownbeard, listed as a threatened species by both the state and federal governments, from two distinct areas of the property, located immediately northeast of the water tank and adjacent to the watercourse, near the southeastern boundary of the property (**Exhibit 4**).³ The Crownbeard was removed during fuel modification activities on the property. Although biologists walked most of the areas subject to fuel modification, a 15,000 square foot area was overlooked. Consequently, the Crownbeard in that area was not flagged as a sensitive species and was removed. The removal constitutes development as defined in Coastal Act Section 30106 and was undertaken without a CDP, in violation of the Coastal Act.

The stem systems of the Crownbeard plants were removed, leaving only the underground root systems intact (**Exhibit 5**). Potentially viable seeds were removed along with the other above-ground structures, thereby causing a reduction in fitness of the portion of the Crownbeard population at issue. In addition, had the Crownbeard not been impacted, it most likely would have grown in size. The temporal loss and loss of fitness cannot be remedied by waiting for the Crownbeard to revegetate. Mitigation as set forth in the Consent Order, consisting of the planting an additional area of Crownbeard, is necessary to address the losses incurred as a result of the violation.

C. History of Commission Action and Coastal Act Violation at Issue

On October 24, 2005, staff received a report that an area around the watercourse on the Driftwood property had been cleared of vegetation. Staff confirmed during a meeting with a representative of Athens, in his capacity as an agent of Driftwood, on November 1, 2005⁴ that a violation had occurred. According to Athens, in October of 2005, Athens, acting as an agent of Driftwood, cleared vegetation in three areas on the property for fuel modification purposes. Prior to the fuel modification activities, Athens hired biologists to flag sensitive species in the areas, so that those conducting the activities would not disturb or remove them. The biologists evaluated and flagged sensitive species in only two of the areas. The third area was overlooked, and Crownbeard was removed from that area.

On November 4, 2005, staff received a document titled, "Draft Restoration Plan for Temporary Impacts to Big-leaved Crownbeard (*Verbesina dissita*) Associated with Fuel Modification Activities" from Athens. Staff sent a violation letter to Athens on December 29, 2005, which confirmed receipt of the draft restoration plan and expressed staff's willingness to work cooperatively with Athens to resolve the violation amicably through a consent order (**Exhibit 6**). Staff conducted a site visit to assess the violation on February 16, 2006.

³ Approximately 452 square feet of Crownbeard was removed from one of the areas and 889 square feet was removed from the other area.

⁴ Staff conducted all correspondence related to this violation with Athens, in its capacity as an agent for Driftwood. Staff has worked closely with Athens to resolve the violation through a Consent Order, as Athens is the entity that has assumed responsibility for resolving the violation on the property.

On April 20, 2006, the Executive Director formally initiated enforcement proceedings by sending Athens a “Notice of Intent to Record a Notice of Violation of the Coastal Act and to Commence Restoration Order Proceedings (NOI)”, pursuant to Title 14 California Code of Regulations Section 13191(a) and Coastal Act Section 30812(a) (**Exhibit 7**). The NOI reiterated that resolving the violation through a consent order was an option, but also set a deadline for submittal of a statement of defense and/or an objection to the recordation of a Notice of Violation to address the possibility that Athens could challenge the enforcement action rather than enter into a consent agreement. Athens agreed to work with Staff and, therefore, did not object to the recordation of the Notice of Violation or submit a statement of defense. Staff worked closely with Athens over the next two months to reach an effective, amicable resolution to the violation. On June 23, 2006, authorized signatories for both Driftwood and Athens signed Consent Restoration Order No. CCC-06-RO-03, a copy of which is attached to this staff report.

D. Basis for Issuance of Restoration Order

The statutory authority for issuance of this Restoration Order is provided for in Coastal Act Section 30811, which states, in relevant part:

In addition to any other authority to order restoration, the commission... may, after a public hearing, order restoration of a site if it finds that [a.] the development has occurred without a coastal development permit from the commission..., [b.] the development is inconsistent with this division, and [c.] the development is causing continuing resource damage.

1. Development Has Occurred Without a Coastal Development Permit

Development is defined in Coastal Act Section 30106, which states:

“Development” means, on land, in or under water, the placement or erection of any solid material or structure; ... and the removal or harvesting of major vegetation other than for agricultural purposes, kelp harvesting, , and timber operations which are in accordance with a timber harvesting plan submitted pursuant to the provisions of the Z'berg-Nejedly Forest Practice Act of 1973 (commencing with Section 4511). (emphasis added)

The previously discussed, the activities at issue in this matter consisted of the removal of major vegetation, including extremely rare and threatened Crownbeard. These activities clearly constitute “development” as defined in Coastal Act Section 30106 and are subject to Coastal Act permitting requirements set forth in Coastal Act Section 30600(a), which states:

(a) Except as provided in subdivision (e), and in addition to obtaining any other permit required by law from any local government or from any state, regional, or local agency, any person, as defined in Section 21066, wishing to perform or undertake any development in the coastal zone, other than a facility subject to Section 25500, shall obtain a coastal development permit.

Commission staff has verified, and Driftwood does not dispute, that the cited development on the property was conducted without a CDP. Accordingly, the Commission is authorized to issue the Consent Order pursuant to Section 30811. The Consent Order will direct Driftwood and Athens,

as an agent of Driftwood, to fully restore the vegetation that was removed and to mitigate for the temporal loss and loss of fitness incurred, in order to return the property to the condition that it would have been in had the violation not occurred.

2. Unpermitted Development is Inconsistent with the Coastal Act

The unpermitted development is inconsistent with Coastal Act Section 30240, which requires protection of all environmentally sensitive habitat areas within the Coastal Zone and subject to regulation under the Coastal Act. Environmentally sensitive habitat areas are defined in Coastal Act Section 30107.5, as follows:

"Environmentally sensitive area" means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments. (emphasis added)

Crownbeard, a state and federally listed threatened species, is a semi-woody perennial shrub that is a member of the sunflower family (*Asteraceae*) (**Exhibit 8**).⁵ It can grow to just over three feet tall and is often found growing on coastal hillsides and in canyons under the canopy of dense southern maritime chaparral and, to a lesser extent, coastal sage scrub and mixed chaparral. This species is extremely rare, found only along a 2-mile stretch of the southern Laguna Beach coast and along the northwestern coast of Baja California, Mexico. The Laguna Beach population is only estimated to contain a few thousand plants.⁶ Approximately 20% of those plants are located within Aliso & Wood Canyons Regional Park and are managed and protected by Orange County.⁷ The remaining 80% of the plants are located on private lands and are threatened by residential development and the recurring fuel modification that is required when development occurs.

Residential development and fuel modification has already impacted the Laguna Beach population.⁸ Individual plants are susceptible to removal during these development activities and large areas of the population can be disturbed by edge effects and other impacts that occur when development fragments the Crownbeard habitat. Cumulative impacts from removal and habitat fragmentation threaten the survival of the species. Thus, Crownbeard is an extremely rare species that has and continues to be affected by human activities.

Coastal Act Section 30240 states the following:

⁵ For state listing, see 14 C.C.R. § 670.1 (2006). For federal listing, see Endangered and Threatened Wildlife and Plants; Determination of Endangered or Threatened Status for Four Southern Maritime Chaparral Plant Taxa from Coastal Southern California and Northwestern Baja California, Mexico, 61 Fed. Reg. 52370-52384 (October 7, 1996) (to be codified at 50 C.F.R. § 17.12(2)(h) (2005)).

⁶ 61 Fed. Reg. 52370-52384, quoting CDFG 1992, Marsh 1992.

⁷ Id.

⁸ California Department of Fish and Game, Section on California's Plants and Animals, *Habitat Conservation Planning Branch*, 2006, available at http://www.dfg.ca.gov/hcpb/cgi-bin/read_one.asp?specy=plants&idNum=218 (last visited June 26, 2006).

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

Driftwood failed to flag an area of Crownbeard habitat prior to conducting fuel modification activities on the property, which would have alerted those conducting fuel modification activities not to disturb the threatened species. As a result, approximately 1341 square feet of Crownbeard was removed. This fuel modification was not a dependent use and significantly disrupted the rare and fragile Crownbeard habitat, in violation of Section 30240(a). Moreover, the Crownbeard removal fragmented the population, potentially impacting a much larger area of Crownbeard in a way that is not compatible with the continuance of the habitat, in violation of Section 30240(b).

3. Unpermitted Development is Causing Continuing Resource Damage

The unpermitted development is causing continuing resource damage, as defined in Title 14, California Code of Regulations, Section 13190, which states:

‘Continuing’, when used to describe ‘resource damage’, means such damage which continues to occur as of the date of issuance of the Restoration Order.

‘Resource’ means any resource which is afforded protection under the policies of Chapter 3 of the Coastal Act, including but not limited to public access, marine and other aquatic resources, environmentally sensitive wildlife habitat, and the visual quality of coastal areas.

‘Damage’ means any degradation or other reduction in quality, abundance, or other quantitative or qualitative characteristic of the resource as compared to the condition the resource was in before it was disturbed by unpermitted development. (emphasis added)

The Crownbeard is afforded protection under Coastal Act Section 30240, and is therefore a “resource” as defined in Title 14, California Code of Regulations, Section 13190(a). The Crownbeard removal reduced the quality and abundance of the rare plant, thereby causing “damage” to the resource, as defined in Title 14, California Code of Regulations, Section 13190(b). Without closely-monitored restoration and appropriate mitigation, which Athens has agreed to undertake as set forth in the Consent Order, the impacts from the temporal loss and loss of fitness that occurred will persist, constituting “continuing” resource damage, as defined in Title 14, California Code of Regulations, Section 13190(c). Therefore, the Commission has the authority under Coastal Act Section 30811 to issue a Restoration Order in this matter.

4. Provisions of Consent Restoration Order No. CCC-06-RO-03

All of the activities set forth in the Consent Order are consistent with and, in fact, are designed to further Chapter 3 resource protection policies. Staff recommends that the Commission issue the Consent Order to facilitate the restoration and mitigation activities necessary to fully resolve the violation at issue in this proceeding and to mitigate the significant impacts to sensitive resources that occurred as a result of the violation. Athens has agreed not only to restore the impacted Crownbeard on the property, but to plant additional Crownbeard to mitigate the temporal loss and loss of fitness that the impacted Crownbeard incurred. Moreover, Athens has also agreed to replace non-native acacia trees in an area of the property with native Big-Pod Ceanothus, in an effort to extend the dominant southern maritime chaparral community and continue the natural character of the surrounding areas.

In addition, the Consent Order requires the submittal of a Restoration Plan, for approval by the Executive Director, before commencement of the activities set forth in the Consent Order. This plan will include a Restoration Map, all methods and performance standards to be used, necessary contingency plans, and a detailed monitoring and maintenance element. The Restoration Plan is a proactive measure that will ensure protection of natural resources and conformity of all restoration and mitigation activities with the policies of Chapter 3 of the Coastal Act.

F. California Environmental Quality Act (CEQA)

The Commission finds that the issuance of Consent Restoration Order CCC-06-RO-03 to compel compliance with the Coastal Act, to restore resources impacted by unpermitted development activities, and to mitigate the impacts that resulted from the unpermitted development is exempt from any applicable requirements of the California Environmental Quality Act of 1970 (CEQA) and will not have any significant adverse effects on the environment, within the meaning of CEQA. The Order is exempt from the requirements for the preparation of an Environmental Impact Report, based on Sections 15060(c)(2), 15060(c)(3), 15061(b)(2), 15037, 15038, and 15321 of the CEQA Guidelines.

G. Findings of Fact

1. Driftwood Properties, LLC is the owner of property located at the northern terminus of Driftwood Drive in the City of Laguna Beach, in Orange County (APN 056-240-65).
2. Athens Development AC, LLC (aka The Athens Group) is an agent of Driftwood Properties, LLC, has been the contact for all telephone discussions with, and the agent of service for all correspondence from, Commission staff related to the violation described in allegations #3 and #4 below, and has assumed responsibility for resolving the violation.
3. Driftwood Properties, LLC has undertaken development on the property, as defined in Coastal Act Section 30106, consisting of the removal of major vegetation including threatened Big-leaved Crownbeard.

4. Driftwood Properties, LLC undertook the development described in allegation #3 above without obtaining a coastal development permit, in violation of the Coastal Act.
5. The unpermitted development described in allegation #3 above impacted Big-leaved Crownbeard, a state and federally listed threatened species and is, therefore, inconsistent with Coastal Act Section 30240.
6. The unpermitted development described in allegation #3 above is causing “ongoing resource damage” within the meaning of Coastal Act Section 30811 and Title 14, California Code of Regulations, Section 13190.
7. Coastal Act Section 30811 authorizes the Commission to issue a restoration order. Coastal Act Section 30812 authorizes the Executive Director to record a Notice of Violation.
8. The work to be performed under this Consent Order, if done in compliance with the Order and the plans approved therein, will be consistent with Chapter 3 of the Coastal Act.
9. On October 24, 2005, staff received a report that vegetation had been cleared from the Driftwood Properties, LLC property.
10. After a November 1, 2005 meeting with a representative from Athens Development AC, LLC, in his capacity as an agent for Driftwood Properties, LLC, Staff confirmed that a violation occurred.
11. On November 4, 2005, staff received a document titled, “Draft Restoration Plan for Temporary Impacts to Big-leaved Crownbeard (*Verbesina dissita*) Associated with Fuel Modification Activities” from Athens Development AC, LLC.
12. On December 29, 2005, staff sent a Notice of Violation letter to Athens Development AC, LLC, confirming receipt of the draft restoration plan and expressing staff’s preference to resolve the violation amicably through a consent order.
13. On April 20, 2006, the Executive Director issued a Notice of Intent to Record a Notice of Violation and to Commence Restoration Order Proceedings to Athens Development AC, LLC, pursuant to Title 14 California Code of Regulations Section 13191(a) and Coastal Act Section 30812(a), to address the unpermitted removal of Crownbeard from the property.
14. On June 23, 2006, authorized signatories for both Driftwood and Athens signed Consent Restoration Order No. CCC-06-RO-03, a copy of which is attached to this staff report.
15. The temporal loss and loss of fitness incurred by the Crownbeard will continue until restoration and mitigation activities resolve the violation and restore the impacted habitat to the condition that it would have been in had the violation not occurred.

Staff recommends that the Commission issue the following Consent Restoration Order:

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CONSENT RESTORATION ORDER CCC-06-RO-03:

1.0 Pursuant to its authority under Public Resources Code §30811, the California Coastal Commission hereby orders and authorizes Driftwood Properties, LLC, all of its partners; subsidiaries; members (including Laguna Beach Holdings LLC, the sole member of Driftwood Properties LLC; together with Ohana Laguna LLC, the sole member of Laguna Beach Holdings LLC); employees; agents including Athens Development AC (aka The Athens Group), LLC; contractors; and any persons acting in concert with any of the foregoing (hereinafter collectively referred to as "Respondents") to restore the property as described below. The restoration and mitigation required under this Consent Order is necessary to resolve a Coastal Act violation, consisting of the unpermitted removal of major vegetation, including 1341 square feet of Big-leaved Crownbeard (*Verbesina dissita*) (hereinafter referred to as "Crownbeard"), which is listed as a "threatened" species by the United States Department of Fish and Wildlife pursuant to the Federal Endangered Species Act (see 50 CFR 17.11, 61 FR 52370) and by the California Department of Fish and Game pursuant to the California Endangered Species Act (see 14 CCR § 670.2), from property owned and managed by Driftwood Properties, LLC, located at the northern terminus of Driftwood Drive in Laguna Beach, Orange County (APN 056-240-65) (hereinafter referred to as "the property"). This Consent Order authorizes the restoration and mitigation activities outlined in the Consent Order. Any development subject to Coastal Act permitting requirements that is not specifically authorized under this Consent Order requires a Coastal Development Permit. Through the execution of this Consent Order, the Respondents agree to comply with the following requirements, with respect to the property:

2.0 TERMS AND CONDITIONS

2.1 Within thirty days of issuance of this Consent Order, Respondents shall submit a Restoration Plan for the review and approval of the Executive Director of the Commission. The Executive Director may require revisions to this and any other deliverables required under the Consent Order, and the Respondents agree to revise and resubmit any such deliverables within ten days of receipt of a modification request from the Executive Director. The Restoration Plan shall outline all restoration and mitigation activities, sampling and analyzing procedures, monitoring and maintenance protocols, contingency plans, and any other activities related to the restoration and mitigation of the Restoration and Mitigation Areas, pursuant to this Consent Order. The Restoration Plan shall be prepared by a restoration ecologist(s) or resource specialist(s), qualified to perform restoration of Crownbeard and Big Pod Ceanothus (*Ceanothus megacarpus*) vegetation in the Laguna Beach area or under conditions similar to those that exist on the property, and shall include and address the following:

A. Definitions

1. Restoration Area: The area, shown as a polygon(s) and clearly labeled on the Restoration Plan Map, pursuant to Section 2.1.C.1.i below, containing the impacted Crownbeard.

2. Mitigation Area(s): The area(s), shown as a polygon(s) and clearly labeled on the Restoration Plan Map that contains the acacia to be removed pursuant to this Consent Order and that will contain the Big-Pod Ceanothus and additional Crownbeard to be planted pursuant to this Consent Order. If two distinct Mitigation Areas must be established- one that contains the acacia to be removed and that will contain the Big-Pod Ceanothus to be planted, and one that will contain the additional Crownbeard to be planted- the areas shall be shown as two polygons on the Restoration Plan Map and shall be clearly labeled as Crownbeard Mitigation Area and Acacia/Ceanothus Mitigation Area.

B. Goals

1. Restoration of 1341 square feet of impacted Crownbeard on the property to the condition that it was in prior to any disturbance, according to the performance standards set forth in Section 2.1.C of this Consent Order.
2. Mitigation, consisting of planting and maintaining an additional 670 square feet of Crownbeard on the property, to mitigate for the temporal loss and loss of fitness that has occurred as a result of the Coastal Act violation.
3. Removal of thirty-one non-native acacia trees from the Mitigation Area, the location of which shall be specified in the Restoration Plan, and prevention of regrowth or invasion of other non-native species in the Mitigation Area.
4. Mitigation, consisting of planting and maintaining thirty-one native Big Pod Ceanothus plants.
5. Monitoring and maintenance of the Restoration and Mitigation Areas for five years, to ensure successful restoration.

C. Methods

1. General Provisions: The Restoration Plan shall include:
 - i. A map showing the property and the location of all restoration and enhancement activities to be conducted pursuant to this Consent Order. The locations of the reference sites as defined in Provision 2.1.C.1.iii of this Consent Order, impacted Crownbeard, Crownbeard Mitigation Area, acacia to be removed, and Big Pod Ceanothus to be planted, shall each be individually

delineated and labeled on the map, so that each location can be clearly identified. The map will include global positioning system coordinates for these locations. Fuel modification zones, as required by the Laguna Beach Fire Department, shall also be delineated.

- ii. A schedule/timeline of restoration and mitigation activities, which identifies the parties who will be conducting the restoration and mitigation activities (agents, employees, contractors, resource specialists, etc.). Restoration procedures recommended by the ecologist/specialist charged with preparing the Restoration Plan shall be utilized. If these procedures require planting to occur at a certain time of year, the Executive Director may, as provided for under Provision 12.0 of this Consent Order and at the written request of Respondents, extend the deadline for planting that is set forth in Provision 2.3 of this Consent Order, to achieve optimal growth of the Crownbeard and Big Pod Ceanothus.
- iii. A detailed description of Crownbeard reference sites, setting forth the rationale for selection, identifying the location and species composition, and describing the history of disturbance from fuel modification activities, fire, etc. The reference sites shall be located as close as possible to the restoration areas.
- iv. A detailed description of all equipment to be used. Hand tools shall be utilized unless the Restoration Plan demonstrates to the satisfaction of the Executive Director that mechanized equipment is required and will not significantly impact resources protected under the Coastal Act, especially the threatened Crownbeard.
- v. A detailed description of any artificial inputs, such as watering or fertilization that may be used to support the establishment of the vegetation. The description shall include a list of the full range of amounts of inputs that may be utilized, and a statement that the minimum amount necessary for successful restoration shall be utilized. Respondents agree that no permanent irrigation system will be installed in the restoration area. If necessary, temporary above ground irrigation to provide for the establishment of the Crownbeard and Big Pod Ceanothus plants is allowed, however, for three years or until the vegetation has become sufficiently established to warrant cessation of the irrigation, whichever occurs first. If, after three years, the

vegetation has not become established, the Executive Director may allow, upon written request from the Respondents, for the continued use of the temporary irrigation system until such time as the vegetation is established.

- vi. An assessment of the possible impacts to sensitive resources on the property, including Crownbeard and dichondra (*Dichondra occidentalis*), from restoration and mitigation activities and procedures for both proactively and retroactively addressing these impacts. Respondents agree that restoration and mitigation activities shall be conducted in a way that minimizes impacts to the property. Other than those areas subject to restoration and mitigation activities, the property and surrounding areas shall not be disturbed by activities related to this Consent Order and to the approved Restoration Plan to the greatest extent practicable. Impacts shall be addressed in the appropriate annual report and shall be remedied by the Respondents. Prior to the initiation of any restoration and mitigation activities, the boundaries of the affected area shall be physically delineated in the field using temporary measures such as fencing, stakes, colored flags, or colored tape.
- vii. Identification of a Commission-approved site for disposal of removed acacia, non-native plants, and any other waste materials that are generated during restoration and mitigation activities. Any hazardous waste shall be disposed of at an appropriate licensed hazardous waste disposal facility. If a disposal site within the Coastal Zone is selected, a coastal development permit may be required.

2. Impacted Crownbeard Revegetation: The Restoration Plan shall detail the methods used to successfully restore the impacted Crownbeard in the Restoration Area. The current location of the Crownbeard restoration area and the specific location of the Crownbeard "clumps" that are to be restored shall be clearly delineated and labeled on the Restoration Map prepared pursuant to Provision 2.1.C.1.i of this Consent Order. All non-natives, with the exception of any acacia, which shall be identified on the Restoration Map required under Section 2.1.C.1.i of this Consent Order, that are providing canopy shading for the impacted Crownbeard, shall be removed from the Restoration Area and maintenance of the area, as set forth in Section 2.1.F.2, shall prevent the re-establishment of non-natives to levels above those specified in Section 2.1.D.5 of this Consent Order. A contingency plan, outlining procedures to address unsuccessful revegetation

shall be included in the Monitoring section of the Restoration Plan, as set forth in Provision E.1 below. To ensure successful restoration of the Restoration Area, the contingency plan shall state that if no Crownbeard plants have become established within two years from the time of seeding, container plants shall be planted in the Restoration Area, the number of which shall be determined by the ecologist/specialist in order to ensure successful restoration under this Consent Order.

3. Mitigation - Additional Crownbeard: The Restoration Plan shall detail the methods used to ensure successful cultivation of an additional 670 square feet of Crownbeard. This section shall specify whether container plants or seed shall be used, the amount of plants or seed to be used, and the location of placement of the plants or seed within the Mitigation Area. All seed or plants shall come from onsite sources if possible. If this is not possible, seed or plants from a source as close to the property as is feasible shall be used, to ensure the genetic integrity of the Crownbeard. A contingency plan, outlining procedures to address unsuccessful growth of the additional Crownbeard shall be included in the Monitoring section of the Restoration Plan, as set forth in Provision E.1 below. To ensure successful vegetation of the Mitigation Area, the contingency plan shall state that if no Crownbeard plants have become established within two years from the time of seeding, container plants shall be planted at the Mitigation area, the number of which shall be determined by the ecologist/specialist in order to ensure successful restoration under this Consent Order. All non-natives shall be removed from the Mitigation Area and maintenance of the area, as set forth in Section 2.1.F.2, shall prevent the re-establishment of non-natives to levels above those specified in the Section 2.1.D.5 of this Consent Order.
4. Mitigation - Acacia Removal: The Restoration Plan shall detail the methods used to remove the thirty-one acacia trees specified in Section 2.1.C.1.i of this Consent Order and shall include information about the location of trees to be removed, the equipment to be used in the removal activities, and disposal procedures. Any acacia trees that are currently shading the impacted Crownbeard will not be removed, as their removal could compromise the Crownbeard revegetation. A contingency plan, which sets forth maintenance activities and alternative eradication methods to prevent regrowth shall be included in the Monitoring section of the Restoration Plan as set forth in Section 2.1.F.1 below. All other non-natives will be removed from the Mitigation Area and maintenance of the area, as set forth in Section 2.1.F.2,

shall prevent the re-establishment of non-natives to levels above those specified in the Section 2.1.C.5 of this Consent Order.

5. Mitigation - Big Pod Ceanothus: The Restoration Plan shall outline the methods used to plant the thirty-one Big Pod Ceanothus plants specified in Section 2.1.C.1.i of this Consent Order. This section shall specify whether container plants or seed shall be used and the location of placement of the plants or seed within the Mitigation Area. All plantings shall utilize seed or plants from onsite sources if possible. If this is not possible, seed or plants from a source as close to the property as is feasible shall be used, to ensure the genetic integrity of the vegetation. A contingency plan, outlining procedures to address unsuccessful growth of Big Pod Ceanothus shall be included in the Monitoring section of the Restoration Plan, as set forth in Section 2.1.F.1 below. All non-natives will be removed from the Mitigation Area and maintenance of the area, as set forth in Section 2.1.F.2, shall prevent the re-establishment of non-natives to levels above those specified in the Section 2.1.D.5 of this Consent Order.

D. Performance Standards

1. General: Each provision in this section shall specify the performance standard to be used, the method of measurement or assessment of the standard, the sampling size, and the frequency of sampling and monitoring. For absolute standards, this section will specify the success criteria and sampling/evaluation procedure. If absolute performance standards cannot reasonably be formed, clear relative standards shall be specified. For relative standards, this section will specify the comparison procedure to be used and the basis for judging differences to be significant. If the comparison between a restoration area and the appropriate reference sites requires a statistical test, the test will be described, including the desired magnitude of difference to be detected, the desired statistical power of the test, and the alpha level at which the test will be conducted. The design of the sampling program shall relate logically to the performance standards and chosen methods of comparison. **The sampling programs and data analysis procedures shall be described in sufficient detail to enable an independent scientist to duplicate them.**
2. Crownbeard [This standard applies to both the impacted Crownbeard and to the additional Crownbeard to be planted as a mitigation measure.]: A relative performance standard shall be utilized, requiring comparison of Crownbeard in the Restoration and Mitigation Areas to three reference sites located as close to the

areas as is feasible. The basal stem densities of the Crownbeard located in the Restoration and Mitigation Areas and the approved reference sites shall be measured. Successful Crownbeard restoration under this Consent Order requires the basal stem density of the Crownbeard in the Restoration and Mitigation areas to be equivalent to at least 80% of the average basal stem density of the Crownbeard located within the reference sites.

3. Acacia: An absolute performance standard shall be utilized. Successful removal under this Consent Order requires the complete removal of the thirty-one acacia trees specified in Section 2.1.C.1.i of this Consent Order and the absence of regrowth of any of the removed trees. The success of the eradication efforts shall be evaluated by photographic analysis and assessment of the area by a qualified restoration ecologist or resource specialist.
4. Big Pod Ceanothus: Absolute performance standards shall be utilized, and shall be detailed in the Restoration Plan. The health of each individual plant shall be evaluated. Successful growth of the Big Pod Ceanothus shall be attained when all thirty-one of the plants have met the approved success criteria specified in the Restoration Plan.
5. Non-Natives:

Efforts shall be made to remove all non-natives from the Restoration and Maintenance Areas ("areas") during the five-year maintenance period. If, during the maintenance period, non-natives are found in the areas, they will be removed according to the monitoring plan submitted pursuant to Section 2.1.F.2 of this Consent Order and/or according to the suggestions made by the qualified ecologist/specialist and detailed in the relevant annual monitoring report(s) pursuant to Section 2.1.F.3 of this Consent Order. At the end of the five-year monitoring period two absolute success criteria shall be utilized to evaluate the success of non-native eradication in the areas. Herbaceous non-native plants shall make up less than 10% of the total vegetation cover in the areas and woody non-natives shall make up less than 5% of the total vegetation cover in the areas.

E. Erosion Control

1. General: All activities conducted on the property pursuant to this Consent Order shall be conducted in a way that does not contribute to erosion on the property. Any increased erosion from the cited unpermitted development or restoration and mitigation activities

conducted pursuant to this Consent Order shall be mitigated, according to the Erosion Contingency Plan, as set forth below.

2. Contingency Plan: Throughout the restoration and monitoring period, Respondents shall conduct regular inspections of the property to determine whether erosion of the property has occurred as a result of the activities undertaken pursuant to this Consent Order and to assess the need to implement erosion control measures (Best Management Practices or BMPs) to ensure that no gullyng or rilling and debris flow across the property occurs. The Restoration Plan shall include an erosion control contingency plan that sets forth the inspection schedule, identifies the BMPs that may be utilized if erosion occurs or is likely to occur, and identifies the erosion indicators that will serve as early warning signals that erosion controls are needed and will trigger implementation of the BMPs.
3. Site Access: Commission staff shall be able to enter the property, according to Provision 13.0 of this Consent Order, as needed to conduct inspections to evaluate erosion concerns.

F. Monitoring and Maintenance

1. The Restoration Plan shall include maintenance and monitoring methodology, including sampling procedures, sampling frequency, and contingency plans to address potential problems with restoration/mitigation activities and/or unsuccessful restoration/mitigation of the Restoration and Mitigation Areas. Monitoring and maintenance activities shall be conducted in a way that does not impact the sensitive resources on the property or on adjacent properties. Any impacts shall be addressed in the appropriate annual report and shall be remedied by the Respondents to ensure successful restoration.
2. The ecologist/specialist that prepares the plan shall recommend the needed maintenance, based on the conditions of the property. Maintenance of the Restoration and Mitigation Areas shall include eradication of non-natives, weed control, implementation of erosion control measures as set forth in Section E of this Consent Order, trash and debris removal, and/or replacement plantings as necessary.
3. The Respondents agree to submit a written report, for the review and approval of the Executive Director, on an annual basis for a period of five years (during the same one-month period each year, as specified in the Restoration Plan). The report shall be prepared by a restoration ecologist or resource specialist, with qualifications as set forth in Section 2.1 of this Consent Order, and shall evaluate compliance with

the approved Restoration Plan. The report shall provide further recommendations for additional action, as necessary, to ensure that restoration and mitigation activities fully comply with the Restoration Plan and this Consent Order and shall include current photographs taken from locations specified in the Restoration Plan that show the progress of the activities. The locations shall be clearly marked and labeled on the restoration map prepared pursuant to Section 2.1.C.1.i of the this Consent Order and shall not change over the course of the monitoring period unless recommended changes are submitted, pursuant to Section 2.1 of this Consent Order, for the review and approval of the Executive Director. Changes shall only be made upon a determination of good cause by the Executive Director.

4. At the end of the five-year monitoring period, Respondents agree to submit a final report prepared by a restoration ecologist or resource specialist, with qualifications as set forth in Section 2.1 of this Consent Order, for the review and approval of the Executive Director. If this report indicates that restoration and mitigation activities have been unsuccessful, in part or in whole, based on the requirements contained in the approved Restoration Plan, Respondents agree to submit a revised or supplemental plan to bring the Restoration and Mitigation Areas into full compliance with this Consent Order. If the restoration and mitigation activities are unsuccessful at the end of the five-year period, Respondents agree to mitigate by a 2:1 replacement using container stock, and the Restoration Plan shall include a description of the methods of this mitigation. The Executive Director will determine if the revised or supplemental Restoration Plan must be processed as a coastal development permit, a new Restoration Order, or an amendment/modification of the this Consent Order.

G. Statement of Qualifications

The Restoration Plan shall include a description of the education, training and experience of the qualified restoration ecologist(s) and/or resource specialist(s) who shall prepare the Restoration Plan and/or conduct restoration, sampling, maintenance, and/or monitoring activities pursuant to this Consent Order. A qualified restoration ecologist/resource specialist for this project shall be an ecologist, arborist, biologist or botanist who has experience successfully completing restoration or revegetation of threatened species and Big Pod Ceanothus habitats in the Laguna Beach area or under conditions similar to those present on the property.

- 2.2 All plans, reports, photographs and any other materials required by these Consent Orders shall be sent to:

California Coastal Commission
Headquarters Enforcement Program

With a copy sent to:
California Coastal Commission

Attn: Christine Chestnut
45 Fremont Street, Suite 2000
San Francisco, California 94105
Phone: (415) 904-5220
Facsimile: (415) 904-5235

Attn: Andrew Willis
200 Oceangate, 10th Floor
Long Beach, CA 90802
Phone: (562) 590-5071
Facsimile: (562) 590-5084

2.3 Within sixty days of the approval by the Executive Director of the documents submitted under Section 2.1 of this Consent Order, or within such additional time as the Executive Director may grant for good cause in accord with the requirements of Section 12.0 herein, Respondents shall complete the following actions in accordance with the schedule/timeline as set forth in the Restoration Plan:

- A. Plant Crownbeard plants or seed, according to the Restoration Plan.
- B. Remove acacia, according to the Remediation Project portion of the Restoration Plan.
- C. Plant Big Pod Ceanothus species, according to the Restoration Plan.
- D. Install any necessary erosion control measures, as required under the Erosion Control Contingency portion of the Restoration Plan.

2.4 All restoration and mitigation activities undertaken pursuant to this Consent Order shall be conducted in accordance with the Laguna Beach Fire Department's Landscape/Fuel Modification Guidelines and Maintenance Program and with all other applicable Laguna Beach Fire Department regulations. A written explanation of any possible conflicts must be submitted to the Executive Director and any suggested modifications made pursuant to a conflict shall be submitted, pursuant to Section 2.1 of this Consent Order, for the review and approval of the Executive Director.

2.5 Within thirty days of the completion of the restoration and mitigation activities described in Provision 2.3 of this Consent Order, Respondents shall submit to the Executive Director of the Commission a report documenting the restoration and remediation activities (and erosion control measures if necessary) undertaken on the property pursuant to this Consent Order. This report shall include a summary of dates on which work was performed and photographs that show the revegetation progress of the impacted Crownbeard, removal of the acacia, planting of the Big Pod Ceanothus and Crownbeard, and implementation of any necessary erosion control measures, as well as photographs of the property after these activities have been completed.

3.0 RECORDATION OF A NOTICE OF VIOLATION

Respondents do not object to recordation by the Executive Director of a notice of violation, pursuant to Public Resources Code Section 30812(b). Accordingly, a notice of

violation will be recorded within ten days of the issuance of this Consent Order. No later than thirty days after the Executive Director determines that Respondents have fully complied with this Consent Order, the Executive Director shall record a notice of rescission of the notice of violation, pursuant to Section 30812(f). The notice of rescission shall have the same effect of a withdrawal or expungement under Section 405.61 of the Code of Civil Procedure.

4.0 PERSONS SUBJECT TO THE ORDER

Driftwood Properties, LLC owns and operates the property and has taken responsibility for the violation. By executing this Order, Athens Development AC, LLC, as an agent of Driftwood Properties, LLC, attests that it has the authority to conduct the work on the property required by this Consent Order and agrees to obtain all necessary permissions (access, etc.) to conduct and complete the work required to resolve the violation. Driftwood Properties, LLC, all of its partners, subsidiaries, members (including Laguna Beach Holdings LLC, the sole member of Driftwood Properties LLC; together with Ohana Laguna LLC, the sole member of Laguna Beach Holdings LLC), employees, agents including Athens Development AC, LLC, and contractors, and any persons acting in concert with any of the foregoing are jointly and severally subject to all the requirements of this Order, and agree to undertake the work required herein.

5.0 IDENTIFICATION OF THE PROPERTY

The property that is the subject of this Consent Order is described as follows:

Lot located at the northern terminus of Driftwood Drive in Laguna Beach, Orange County (APN 056-240-65), more specifically described in the attached Exhibit A.

6.0 DESCRIPTION OF ALLEGED COASTAL ACT VIOLATION

Unpermitted removal of major vegetation, including 1341 square feet of Big-leaved Crownbeard (*Verbesina dissita*) (hereinafter referred to as "Crownbeard"), which is listed as a "threatened" species by the United States Department of Fish and Wildlife pursuant to the Federal Endangered Species Act (*see also* 61 FR 52370) and by the California Department of Fish and Game pursuant to the California Endangered Species Act (*see also* 14 CCR 670.2), from property.

7.0 COMMISSION JURISDICTION

The Commission has jurisdiction over resolution of this alleged Coastal Act violation pursuant to Public Resources Code Section 30811. Respondents agree to not contest the Commission's jurisdiction to issue or enforce this Consent Order.

8.0 WAIVER OF DEFENSES

In light of the intent of the parties to resolve these matters in settlement, Respondents have waived their right to contest the legal and factual bases and the terms and issuance

of this Consent Order, including the allegations of Coastal Act violations contained in the Notice of Intent to Record a Notice of Violation of the Coastal Act and to Commence Restoration Order Proceedings, dated April 20, 2006. Specifically, Respondents waive their right to present defenses or evidence to contest the issuance or enforcement of the Consent Order at a public hearing or any other proceeding.

9.0 EFFECTIVE DATE AND TERMS OF THE ORDER

The effective date of this order is the date on which it is approved by the Commission. This order shall remain in effect permanently unless and until rescinded by the Commission.

10.0 FINDINGS

This order is issued on the basis of the findings adopted by the Commission at its July 2006 meeting, as set forth in the attached document entitled "Findings for Consent Agreement and Restoration Order No. CCC-06-RO-03." The activities authorized and required in this Consent Order are consistent with the resource protection policies set forth in Chapter 3 of the Coastal Act.

11.0 SETTLEMENT/COMPLIANCE OBLIGATION

- 11.1 In light of the intent of the parties to resolve these matters in settlement, Respondent Driftwood Properties, LLC has agreed to pay a monetary settlement in the amount of \$30,000. The settlement monies shall be deposited in the Violation Remediation Account of the California Coastal Conservancy Fund (see Public Resources Code Section 30823). Respondent Driftwood Properties, LLC shall submit the settlement payment amount within thirty days of the issuance of this Consent Order, to the attention of Christine Chestnut of the Commission, payable to the California Coastal Commission/Coastal Conservancy Violation Remediation Account.
- 11.2 Within thirty days of the issuance of this Consent Order, Respondent Driftwood Properties, LLC shall post a bond, as a form of financial guaranty, in an amount equal to the estimated amount of the restoration and mitigation activities required under this Consent Order, which shall be determined by the restoration ecologist or resource specialist preparing the Restoration Plan and shall be subject to the review and approval of the Executive Director.
- 11.3 Strict compliance with this Consent Order by all parties subject thereto is required. Failure to comply with any term or condition of this Consent Order, including any deadline contained in this Consent Order, unless the Executive Director grants an extension under 12.0, will constitute a violation of this Consent Order and shall result in Respondents being liable for stipulated penalties in the amount of \$500 per day per violation. Respondents shall pay stipulated penalties within fifteen days of receipt of written demand by the Commission for such penalties regardless of whether Respondents have subsequently complied. If

Consent Restoration Order, CCC-06-RO-03

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Respondents violate this Consent Order, nothing in this agreement shall be construed as prohibiting, altering, or in any way limiting the ability of the Commission to seek any other remedies available, including the imposition of civil penalties and other remedies pursuant to Public Resources Code Sections 30821.6, 30822 and 30820 as a result of the lack of compliance with the Consent Order and for the underlying Coastal Act violations as described herein.

12.0 DEADLINES

Prior to the expiration of any deadline established by this Consent Order, Respondents may request from the Executive Director an extension of that deadline. Such a request shall be made in writing ten days in advance of the deadline and directed to the Executive Director in the San Francisco office of the Commission. The Executive Director shall grant an extension of any deadline upon a showing of good cause, if the Executive Director determines that Respondents have diligently worked to comply with their obligations under this Consent Order but cannot meet deadlines due to unforeseen circumstances beyond its control.

13.0 SITE ACCESS

By this agreement, Respondents specifically agree to provide access to the property at all reasonable times to Commission staff and any agency having jurisdiction over the work being performed under this Consent Orders. Nothing in this Consent Order is intended to limit in any way the right of entry or inspection that any agency may otherwise have by operation of any law. The Commission staff may enter and move freely about the property for purposes including but not limited to inspecting records, operating logs, and contracts relating to the Restoration and Mitigation Areas and overseeing, inspecting and reviewing Respondents' progress in carrying out the terms of this Consent Order.

14.0 GOVERNMENT LIABILITIES

The State of California, the Commission and its employees shall not be liable for injuries or damages to persons or property resulting from acts or omissions by Respondents in carrying out activities pursuant to this Consent Order, nor shall the State of California, the Commission or its employees be held as a party to any contract entered into by Respondents or their agents in carrying out activities pursuant to this Consent Order.

15.0 WAIVER OF RIGHT TO JUDICIAL REVIEW

Persons against whom the Commission issues a Restoration Order have the right to seek judicial review of the order. However, pursuant to the agreement of the parties as set forth in these Consent Orders, Respondents agree to waive whatever right they may have to seek judicial review of these Consent Orders in a court of law.

16.0 SETTLEMENT OF CLAIMS

Consent Restoration Order, CCC-06-RO-03

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The Commission and Respondents agree that this Consent Order settles their monetary claims for relief for those violations of the Coastal Act specified in Section 1.0 of this Consent Order (specifically including claims for civil penalties, fines, or damages under the Coastal Act, including Sections 30805, 30820, and 30822), with the exception that, if Respondents fail to comply with any term or condition of this Consent Order, the Commission may seek monetary or other claims for both the underlying violations of the Coastal Act and for the violation of this Consent Order. In addition, this Consent Order does not limit the Commission from taking enforcement action due to Coastal Act violations at the property other than those that are the subject of the April 20, 2006 NOI.

17.0 SUCCESSORS AND ASSIGNS

This Consent Order shall run with the land binding Respondents and all successors in interest, heirs, assigns, and future owners of the property. Respondents shall provide notice to all successors, assigns, and potential purchasers of the property of any remaining obligations under this Consent Order.

18.0 MODIFICATIONS AND AMENDMENTS

Except as provided in Section 12.0, this Consent Order may be amended or modified only in accordance with the standards and procedures set forth in Section 13188(b) of the Commission's administrative regulations.

19.0 GOVERNMENTAL JURISDICTION

This Consent Order shall be interpreted, construed, governed and enforced under and pursuant to the laws of the State of California.

20.0 LIMITATION OF AUTHORITY

20.1 Except as expressly provided herein, nothing in this Consent Order shall limit or restrict the exercise of the Commission's enforcement authority pursuant to Chapter 9 of the Coastal Act, including the authority to require and enforce compliance with this Consent Order.

20.2 Correspondingly, Respondents have entered into this Consent Order and waived their right to contest the factual and legal basis for issuance of this Consent Order, and the enforcement thereof according to its terms. Respondents have agreed not to contest the Commission's jurisdiction to issue and enforce this Consent Order.

21.0 INTEGRATION

This Consent Order constitutes the entire agreement between the parties and may not be amended, supplemented, or modified except as provided in this Consent Order.

22.0 STIPULATION

Respondents and their representatives attest that they have reviewed the terms of this Consent Order and understand that their consent is final and stipulate to its issuance by the Commission.

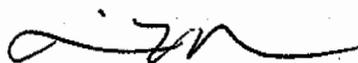
IT IS SO STIPULATED AND AGREED:

On behalf of Respondents:

DRIFTWOOD PROPERTIES LLC,
a Delaware limited liability company

By: Laguna Beach Holdings LLC
Its: Sole Member

By: Ohana Laguna LLC
Its: Manager



By: Richard F. Ross
Its: Authorized Representative

6/23/06
Date

ATHENS DEVELOPMENT AC, LLC



Jeffrey J. Morgan, Manager,
Athens Development AC, LLC

6/23/06
Date

Executed in San Diego, CA on behalf of the California Coastal Commission:

Peter Douglas, Executive Director

Date

CCC-06-RO-03

Exhibit List

Exhibit

Number

Description

1. Site Map and Location.
2. Photograph of vegetation on the property, submitted on October 24, 2005.
3. Letter to Athens from Steve Nelson, a consultant from PCR Services Corporation hired by Athens to prepare an impacts analysis, dated November 2, 2005.
4. Draft map of Crownbeard restoration, mitigation, and reference sites, submitted by Athens on March 30, 2006.
5. Photographs showing area where Crownbeard was removed, dated October 27, 2005.
6. Notice of Violation letter from Commission staff to Athens, dated December 29, 2005.
7. Notice of Intent to Record a Notice of Violation and to Commence Restoration Order Proceedings from Executive Director to Athens, dated April 20, 2006.
8. Final Rule published by United States Fish and Wildlife Service entitled, *Determination of Endangered and Threatened Status for Four Southern Maritime Chaparral Plant Taxa from Coastal Southern California and Northwestern Baja California, Mexico*, at 61 Fed. Reg. 52370-52384, dated October 7, 1996.



Exhibit 1: Property Location



Photograph of the vegetation on the property, submitted to Commission staff by a concerned citizen on October 24, 2005.

November 2, 2005



NOV 4 2005

CALIFORNIA
COASTAL COMMISSION

Mr. Martyn Hoffmann
THE ATHENS GROUP
31106 Pacific Coast Highway
Laguna Beach, California 92651

Re: ANALYSIS OF POTENTIAL IMPACTS TO SENSITIVE PLANTS, WILDLIFE, AND HABITATS RESULTING FROM FUEL MODIFICATION ACTIVITIES IN THE CITY OF LAGUNA BEACH, ORANGE COUNTY, CALIFORNIA

Dear Mr. Hoffmann:

PCR Services Corporation (PCR) conducted an analysis of impacts to sensitive plants, wildlife, and habitats ("sensitive biological resources") resulting from fuel modification activities conducted on behalf of Driftwood Properties LLC in an area surrounding a water tank near the southeastern boundary of the Driftwood Estates Property in the City of Laguna Beach, Orange County, California (Figure 1, Location Map, attached). This analysis was conducted to determine the nature and extent of any impacts to sensitive biological resources. In addition to this analysis, Glenn Lukos Associates (GLA) analyzed impacts to jurisdictional drainage features (summarized herein).

Based on a thorough literature review, a field assessment of the fuel modified areas and stands of big-leaved crownbeard (*Verbesina dissita*) in the vicinity, consideration for relevant elements of the life history and ecology of the species, recent surveys for big-leaved crownbeard covering the entire Driftwood Estates/Aliso Creek Inn and Golf Course Property, and a quantitative analysis of impacts to big-leaved crownbeard and southern maritime chaparral in relation to the area-wide populations, the following conclusions were made relative to sensitive biological resources:

- The big-leaved crownbeard is expected to fully recover based on its ability to resprout from undisturbed rootstock.
- The fuel modified area contained 0.2 percent (two one-thousandths) of the total big-leaved crownbeard mapped on the Driftwood Estates/Aliso Creek Inn and Golf Course Property, which will not affect the long-term sustainability of the species.
- The fuel modified area supported one percent of southern maritime chaparral that is known to occur on the Driftwood Estates/Aliso Creek Inn and Golf Course Property and the functions and values of this habitat type on the property will remain intact.
- No impacts occurred to any other sensitive plant or wildlife species.

Exhibit 3
CCC-06-RO-03 & CCC-06-NOV-02
(Driftwood Properties, LLC)
Page 1 of 15



BACKGROUND

As a brief background, at the request of local homeowners, fuel modification brush clearing activities were initiated at the urban/wildland interface in an area north of Ocean Vista Drive ("fuel modified area") (refer to Figure 1, *Location Map*). These activities occurred within an area that, to the best of our knowledge, is not nor has ever been slated for development.

PCR was contacted in July and October 2005 for work associated with clearing two separate areas, Areas A and B shown on Figure 2, *Fuel Modified Area*, attached. Areas A and B were walked by PCR Senior Biologists Linda Robb on July 19, 2005 and Kristin Szabo on October 10, 2005, respectively. Any sensitive plant species observed were flagged prior to clearing. Memos of the results of each of the site visits are included in Appendix A, *Fuel Modification Survey Memos*. The Laguna Beach Fire Department (LBFD) was contacted for direction prior to clearing these areas. Representatives of the LBFD visited the sites prior to clearing and agreed that the canopy level of the trees be raised to reduce the possibility of fire jumping from the ground to the trees and asked that the root structure of live plants remain intact to avoid future erosion issues. Fuel modification activities complied with LBFD directives and the LBFD provided verbal approval after the work was completed. The sensitive plant species that were flagged were not impacted by these fuel modification activities.

Fuel Modified Area C, shown in Figure 2, was cleared without prior review by PCR. The fuel modified area consists of an approximately 50-foot wide by 300 foot long strip beyond the water tank fence line to the north and east. All clearing was conducted by hand or with hand tools, without the use of heavy machinery, and did not disturb the soil or root structure of plants.

As presented in detail below, it appears that no sensitive wildlife were impacted and one sensitive habitat, southern maritime chaparral, and one sensitive plant species, big-leaved crownbeard were minimally impacted by the clearing.

JURISDICTIONAL FEATURES

A portion of the fuel modified area is within a City of Laguna Beach (City) Significant Natural Drainage Course as defined in the Laguna Beach General Plan, Open Space and Conservation Element (LBGP) (refer to in Figure 3, *City Delineated High Value and Very High Value Habitat Areas*, attached).

Pursuant to the October 27, 2005 electronic mail from Thienan Ly of GLA to the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Game (CDFG), the fuel modification activities did not result in a discharge of dredged or fill material or a substantial diversion, obstruction, change of, or disposal within a jurisdictional feature. Also, no riparian habitat was present within or adjacent to the drainage, and only upland vegetation was removed. Therefore, the clearing activity did not result in any violation to Section 404 of the Clean Water Act (CWA) or Section 1602 of the State Fish and Game Code.



Concurrence was received from the ACOE via electronic mail on the same day. A copy of this correspondence is included in Appendix B, *Regulatory Agency Correspondence*.

LITERATURE REVIEW

For the purposes of this assessment, the following resources were utilized to ensure a comprehensive analysis:

- Abrams, L. and Ferris, R.S. 1960. *Illustrated Flora of the Pacific States*. Stanford: Stanford University Press.
- CDFG. California Department of Fish and Game, Natural Diversity Database. May 27, 2005. *RareFind 3*. Sacramento.
- CDFG. California Department of Fish and Game. Wildlife and Habitat Data Analysis Branch. California Natural Diversity Database. July 2005. *Special Animals*.
- CDFG. California Department of Fish and Game, Natural Diversity Database. October 2005. *Special Vascular Plants, Bryophytes, and Lichens List*. Quarterly publication, Mimeo. 97 pp.
- City of Laguna Beach. Adopted May 1, 1984. Amended October 2, 2001. *Laguna Beach General Plan Open Space and Conservation Element*.
- Hickman, J. C. 1993. *The Jepson Manual: Higher Plants of California*. Berkeley: University of California Press.
- LSA Associates, Inc. August 17, 2000. *Biological Resources Assessment, Driftwood Estates-Laguna Beach Project*. Prepared for Highpointe Communities, Inc.
- Marsh, Karlin. 1993. *Laguna Canyon Biological Resources Inventory*.
- Marsh, Karlin. 1992. *South Laguna Biological Resources Inventory*.
- PCR Services Corporation. 2004 and 2005. Results of focused sensitive plant surveys.
- Roberts, Fred. Personal Communication. October 27 and 28, 2005.
- USFWS. U.S. Department of the Interior, Fish and Wildlife Service. October 7, 1996. *Endangered and Threatened Wildlife and Plants; Determination of Endangered or Threatened Status*



for Four Southern Maritime Chaparral Plant Taxa from Coastal Southern California and Northwestern Baja California, Mexico; Final Rule. 50 CFR Part 17. Federal Register Vol. 61, No 195: 52370-52384.

- USFWS. U.S. Department of the Interior, Fish and Wildlife Service. October 1, 1993. *Endangered and Threatened Wildlife and Plants; Proposed Rule for Six Southern Maritime Chaparral Plant Taxa from Coastal Southern California and Northwestern Baja California, Mexico.* 50 CFR Part 17. Federal Register Vol. 58, No 189: 51312-51311.

KEY LIFE HISTORY ASPECTS OF THE BIG-LEAVED CROWNBEARD RELATIVE TO THIS ASSESSMENT

The following presents information pertaining to the life history of big-leaved crownbeard and focuses on those aspects relevant to the purposes of analysis. The information was obtained from the *Determination of Endangered or Threatened Status for Four Southern Maritime Chaparral Plant Taxa from Coastal Southern Baja California and Northwestern Baja California, Mexico* (50 CFR Part 17, 52370-52384, October 7, 1996) in addition to personal communication with professional botanist Fred Roberts on October 27 and 28, 2005.

Big-leaved crownbeard, a State and Federally-listed threatened species, is a low-growing semi-woody perennial shrub and is a member of the sunflower family (Asteraceae). This species is found on rugged hillsides in dense southern maritime chaparral, and to a lesser extent, southern mixed chaparral, toyon-sumac chaparral, Diegan coastal sage scrub, and Venturan-Diegan transitional coastal sage scrub. In California, big-leaved crownbeard is restricted to rugged coastal canyons and is associated with San Onofre breccia-derived soils in South Laguna and Dana Point of southern Orange County.

This species normally persists in relatively dense brush; however, it is known to respond favorably to some clearing and fires. For example, in 1984, a fuel break was established through a big-leaved crownbeard population on Temple Hill in Laguna Beach, approximately two miles north of the fuel modified area. This population was monitored for approximately five years after the vegetation removal. For the first three years, the population responded favorably; however, the plants exhibited reduced health and vigor in the fourth year, apparently as the result of the removal of larger shrub species that were shading the crownbeard¹.

It should be noted that no soil disturbance occurred within the fuel modified area in this analysis and the mature overstory plants, which will continue to provide shade as they did prior to crownbeard removal, were not removed from the fuel modified area. Therefore, big-leaved crownbeard is expected

¹ Roberts, Fred. Personal Communication. October 27 and 28, 2005



to successfully resprout within the fuel modified area and exhibit stem densities consistent with the pre-clearing condition².

Big-leaved crownbeard typically grows to a height of 1.6-3.3 feet, has distinctive scabrous (rough to the touch) leaves, and, in the summer, produces bright yellow flowers. Observing this species during the blooming period is hindered by the tall shrub overstory surrounding the new growth. It also appears similar to other species such as California bush sunflower (*Encelia californica*). This species spreads clonally; therefore, clumps may contain individuals with no genetic variability. New leaves appear on the existing stems and new stems grow from the root base. In the fall, big-leaved crownbeard loses its leaves and the stems become dormant. During the winter months, this species is not easily detectable. Based on the clonal nature and seasonal variation in appearance, big-leaved crownbeard, for this analysis, was best quantified by comparing the size of the fuel modified area to a larger, defined area of occupied habitat (i.e., the Driftwood Estates/Aliso Creek Inn and Golf Course Property).

BIG-LEAVED CROWNBEARD DISTRIBUTION AND POPULATION SIZE

The population size of this species is difficult to estimate because of its low growth habit and preference for understory locations. It is also not clear what constitutes an individual. This species occurs in two disjunct populations, one in coastal southern Orange County and the other in coastal northwestern Baja California. Approximately 85 percent of the known populations of big-leaved crownbeard are known from northwestern Baja California. In Orange County, less than 10 percent of the known populations of big-leaved crownbeard extend into Aliso and Wood Canyons Wilderness Park, which is managed for biological conservation. The Orange County populations have been estimated to contain several thousand plants³.

Focused plant surveys were conducted for big-leaved crownbeard by PCR biologists in the spring and summer of 2004 and 2005 on the Driftwood Estates/Aliso Creek Inn and Golf Course Property. Figure 4, *Observed Locations of Big-Leaved Crownbeard*, shows the distribution of this species within the Driftwood Estates/Aliso Creek Inn and Golf Course Property as observed during these focused surveys. A total of 13.3 acres of occupied big-leaved crownbeard habitat were mapped on the Driftwood Estates/Aliso Creek Inn and Golf Course Property.

IMPACT ASSESSMENT OF THE AREA AFFECTED BY FUEL MODIFICATION ACTIVITIES

On October 26, 2005, PCR Senior Biologists Kristin Szabo and Linda Robb conducted a biological survey of Area C (see Figure 2) to determine the nature and extent of impacts to sensitive

² Glenn Lukos Associates. November 1, 2005. Draft Restoration Plan for Temporary Impacts to Big-leaved Crownbeard (*Verbesina dissita*) Associated with Fuel Modification Activities.

³ USFWS. U.S. Department of the Interior, Fish and Wildlife Service. October 7, 1996. Endangered and Threatened Wildlife and Plants; Determination of Endangered or Threatened Status for Four Southern Maritime Chaparral Plant Taxa from Coastal Southern California and Northwestern Baja California, Mexico; Final Rule. 50 CFR Part 17. Federal Register Vol. 61, No 195: 52370-52384.



biological resources for this Area. The outer edge of the fuel modified area was mapped with a GPS unit to ensure accuracy when calculating the limit of impact. The inner edge of impact is the water tank fence line. The total area that was fuel modified in Area C is approximately 18,500 square-feet (0.43 acre) and is shown in Figure 2, *Fuel Modified Area*, and Figure 5, *Photographs of Fuel Modified Area*, attached.

Sensitive Habitat

The fuel modified area is not within High Value Habitat or Very High Value Habitat Areas as defined by the City in the LBG (refer to Figure 3, *City Delineated High Value and Very High Value Habitat Areas*, attached).

Clearing occurred at an urban/wildland edge within southern maritime chaparral habitat, considered a locally sensitive habitat because of its limited distribution and potential to support sensitive plant species. The remaining overstory in the fuel modified area was dominated by an ornamental species of acacia (likely planted for fuel management purposes associated with adjacent development) and big-pod ceanothus (*Ceanothus megacarpus*). Additional species observed included toyon (*Heteromeles arbutifolia*), laurel sumac (*Malosma laurina*), lemonadeberry (*Rhus integrifolia*), and bushrue (*Cneoridium dumosum*).

Approximately 0.63 acre of this habitat type was impacted within the fuel modified areas (Area A, B, and C on Figure 2). This represents one percent of the total southern maritime chaparral habitat mapped on the Driftwood Estates/Aliso Creek Inn and Golf Course Property.

Southern maritime chaparral is a vegetation association characterized by the occurrence of plant species that find their northern limits in Orange County but are more common to the south in coastal San Diego County and Baja California. As a vegetation association, southern maritime chaparral is not regulated by State or Federal resource agencies and its sensitivity is based solely on its limited distribution within the boundaries of Orange County and the Laguna Beach Coastal Plan area. Within this context, impacts to 0.63 acre of southern maritime chaparral are not substantial and/or significantly adverse.

Big-leaved Crownbeard

During the October 26, 2005 site visit, Ms. Szabo and Ms. Robb observed intact big-leaved crownbeard at the edge of the cleared area. At this time of year, big-leaved crownbeard is dormant and is recognizable by the remaining flower stalks and remaining dried leaves on the stems. Figure 6, *Big-leaved Crownbeard Photograph*, attached, shows the current condition of this species within intact habitat adjacent to the fuel modified area. It is important to note that where the big-leaved crownbeard occurs, its leaves are readily apparent in the ground litter within 18-24 inches away from the plant.



Ms. Szabo and Ms. Robb closely examined the leaf litter and compared the dried leaves on the intact plants adjacent to the fuel modified area with the leaves in the leaf litter of the fuel modified area and determined that big-leaved crownbeard occurred in two distinct areas within the fuel modified area (refer to Figure 2, *Fuel Modified Area*). The westernmost area, Area 1, is approximately 889 square feet (0.02 acre). The easternmost area, Area 2, is approximately 452 square feet (0.01 acre).

In an effort to calculate the number of big-leaved crownbeard plants that were removed, an additional site visit was conducted by Ms. Szabo, Ms. Robb, and PCR Director of Biological Services Steve Nelson on October 27, 2005. Professional resumes for Ms. Szabo, Ms. Robb, and Mr. Nelson are included in Appendix C, *Resumes*. PCR surveyed southern maritime chaparral habitat occupied by big-leaved crownbeard adjacent to the fuel modified area and considered a number of scientific sampling methods to determine big-leaved crownbeard density. It was determined that counting the number of big-leaved crownbeard plants was not practical and would cause additional impacts (i.e., trampling) within intact southern maritime chaparral habitat. Therefore, PCR concluded that by comparing the size of the fuel modified area with known occupied habitat acreages on the adjacent Driftwood Estates/Aliso Creek Inn and Golf Course Property, a percentage of occupied habitat impacted could be estimated. Using the resources listed above, it was determined that 13.3 acres of occupied big-leaved crownbeard habitat occur on the entire Driftwood Estates/Aliso Creek Inn and Golf Course Property in addition to occupied habitat that occurs off-site. Therefore, the impacted area as a result of fuel modification activities represents 0.2 percent (two one-thousandths) of the total amount of occupied big-leaved crownbeard habitat estimated to occur on the Driftwood Estates/Aliso Creek Inn and Golf Course Property.

A Big-leaved Crownbeard Restoration and Conservation Plan, which details the restoration and conservation strategy as it related to this species, has been prepared by GLA and is available under separate cover.

Other Sensitive Plant Species

A review of the literature concluded that other sensitive plant species occur in the habitat immediately surrounding the fuel modified area including western dichondra (*Dichondra occidentalis*), a California Native Plant Society (CNPS) List 4⁴ species, and foothill mariposa lily (*Calochortus weedii* var. *intermedius*), a CNPS List 1B⁵ species. The western dichondra and foothill mariposa lily are perennial herbs that act like annuals (i.e., they resprout from a bulb or underground root system and die back each year) and are not detectable at this time of year. Because the ground surface was not disturbed during the clearing activities, only above-ground biomass of live plants were removed, no impacts occurred to these two species.

⁴ The List 4 status denotes that a species is of limited distribution or is infrequent throughout a broader area in California and its vulnerability or susceptibility to threat appears to be low at this time. List 4 plants cannot be called "rare" from a statewide perspective; however, they are uncommon enough that they are monitored regularly.

⁵ List 1B species are rare or endangered in California and elsewhere.



Sensitive Wildlife Species

A review of the literature concluded that a number of sensitive wildlife species could occur in the fuel modified area including orange-throated whiptail (*Cnemidophorus hyperythrus*), silvery legless lizard (*Anniella pulchra pulchra*), coast patch-nosed snake (*Salvador hexalepis virgulata*), northern red-diamond rattlesnake (*Crotalus ruber ruber*), Cooper's hawk (*Accipiter cooperii*), sharp-shinned hawk (*Accipiter striatus*), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), Bell's sage sparrow (*Amphispiza belli belli*), northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*), San Diego desert woodrat (*Neotoma lepida intermedia*), and southern grasshopper mouse (*Onychomys torridus ramona*). None of these species are State or Federally listed as threatened or endangered; however, they all are California Species of Special Concern. Because the clearing occurred with hand tools and did not disturb the soil or ground surface, these species, if present within the fuel modified area, would have escaped and were not impacted by the clearing. Additionally, since the impact to southern maritime chaparral habitat was so minimal one percent of the Driftwood Estates/Aliso Creek Inn and Golf Course Property), no long-term effects on populations of these species are expected.

CONCLUSION

Based on the assessment and findings described above, it is PCR's conclusion that the areas of big-leaved crownbeard and southern maritime chaparral affected by the fuel modification activities do not pose a threat to the long-term sustainability of either the local or area-wide populations of these resources for the following reasons:

- Given the ability of the big-leaved crownbeard to resprout from roots on an annual basis and following fire and other disturbances, and absence of disturbances to the soil in the fuel modification areas, it is fully expected to recover in the areas where above-soil surface plant material was removed.
- The fuel modified area contained only a small portion of the population growing on the ridgeline and slopes directly east and above the water tank, and the genetic variability provided by this localized population will remain intact.
- The area of southern maritime chaparral within the fuel modified area represents one percent of the southern maritime chaparral habitat that is known to occur on the Driftwood Estates/Aliso Creek Inn and Golf Course Property and the functions and values of this habitat type on the property will remain intact.
- The areas of big-leaved crownbeard affected by fuel modification represent only 0.2 percent (two one-thousandths) of the population within the Driftwood Estates/Aliso Creek Inn and Golf Course Property and the surrounding area, and the stability of overall population numbers will remain as it was before the impacts occurred.

Mr. Martyn Hoffmann
THE ATHENS GROUP
November 2, 2005 - Page 9



This conclusion is based on relevant elements of the life history and ecology of the species, a field assessment of the fuel modified areas and stands of big-leaved crownbeard in the vicinity, recent surveys for big-leaved crownbeard covering the entire Driftwood Estates/Aliso Creek Inn and Golf Course Property, and a quantitative analysis of impacts to big-leaved crownbeard and southern maritime chaparral in relation to the area-wide populations.

Should you have any questions regarding the methodology or findings of this analysis, please do not hesitate to contact Steve Nelson at (949) 753-7001.

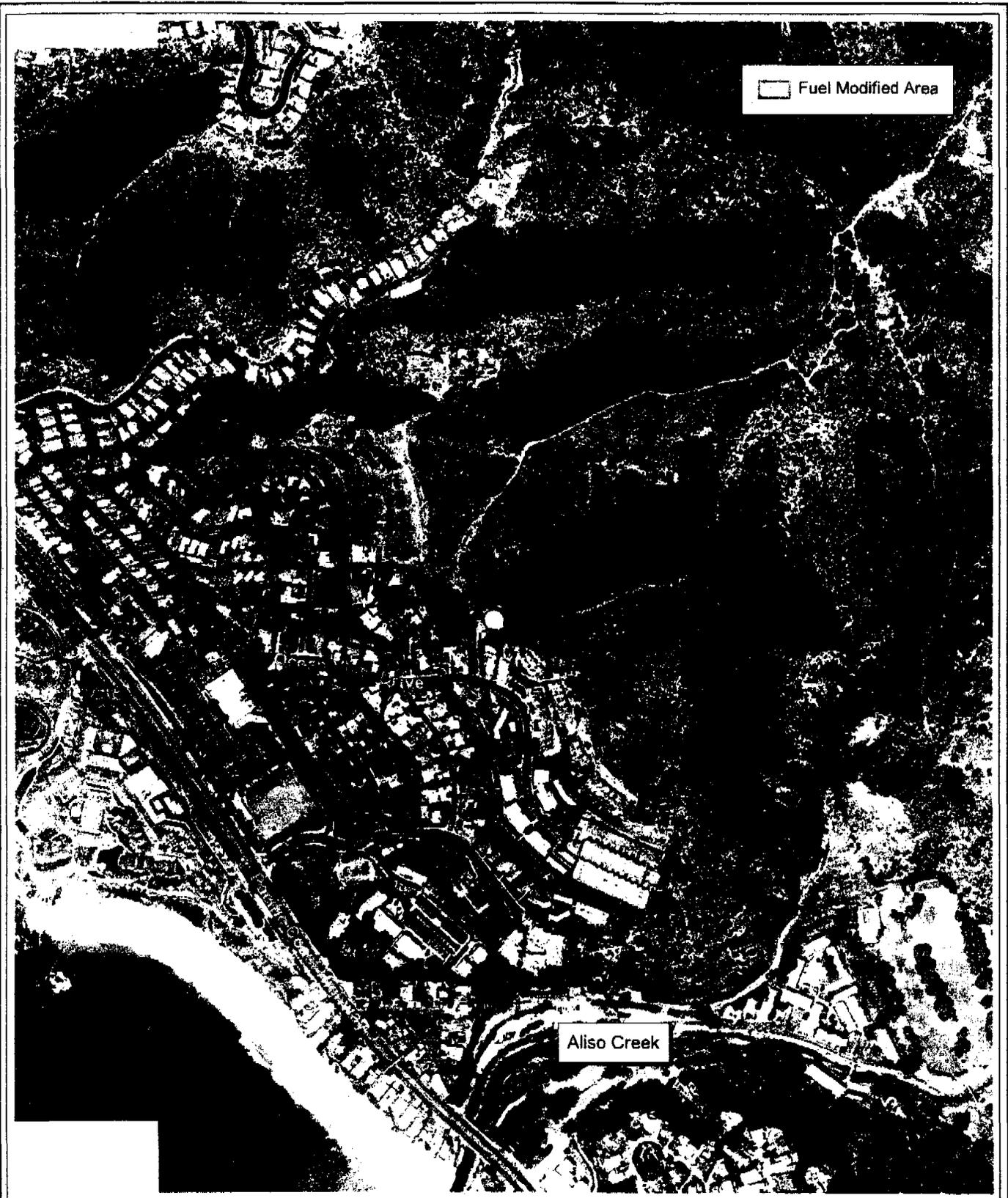
Sincerely,
PCR SERVICES CORPORATION

A handwritten signature in black ink that reads "Steven S. Nelson".

Steve Nelson
Director of Biological Services

Attachments

- Appendix A, Fuel Modification Survey Memos
- Appendix B, Regulatory Agency Correspondence
- Appendix C, Resumes
- Figure 1, Location Map
- Figure 2, Fuel Modified Area
- Figure 3, City Delineated High Value and Very High Value Habitat Areas
- Figure 4, Observed Locations of Big-Leaved Crownbeard
- Figure 5, Photographs of Fuel Modified Area
- Figure 6, Big-leaved Crownbeard Photograph



Source: Forma, 2004 / Aerial
PCR Services Corp

Figure 1
Driftwood Estates/Aliso Creek
Inn and Golf Course Property
Location Map

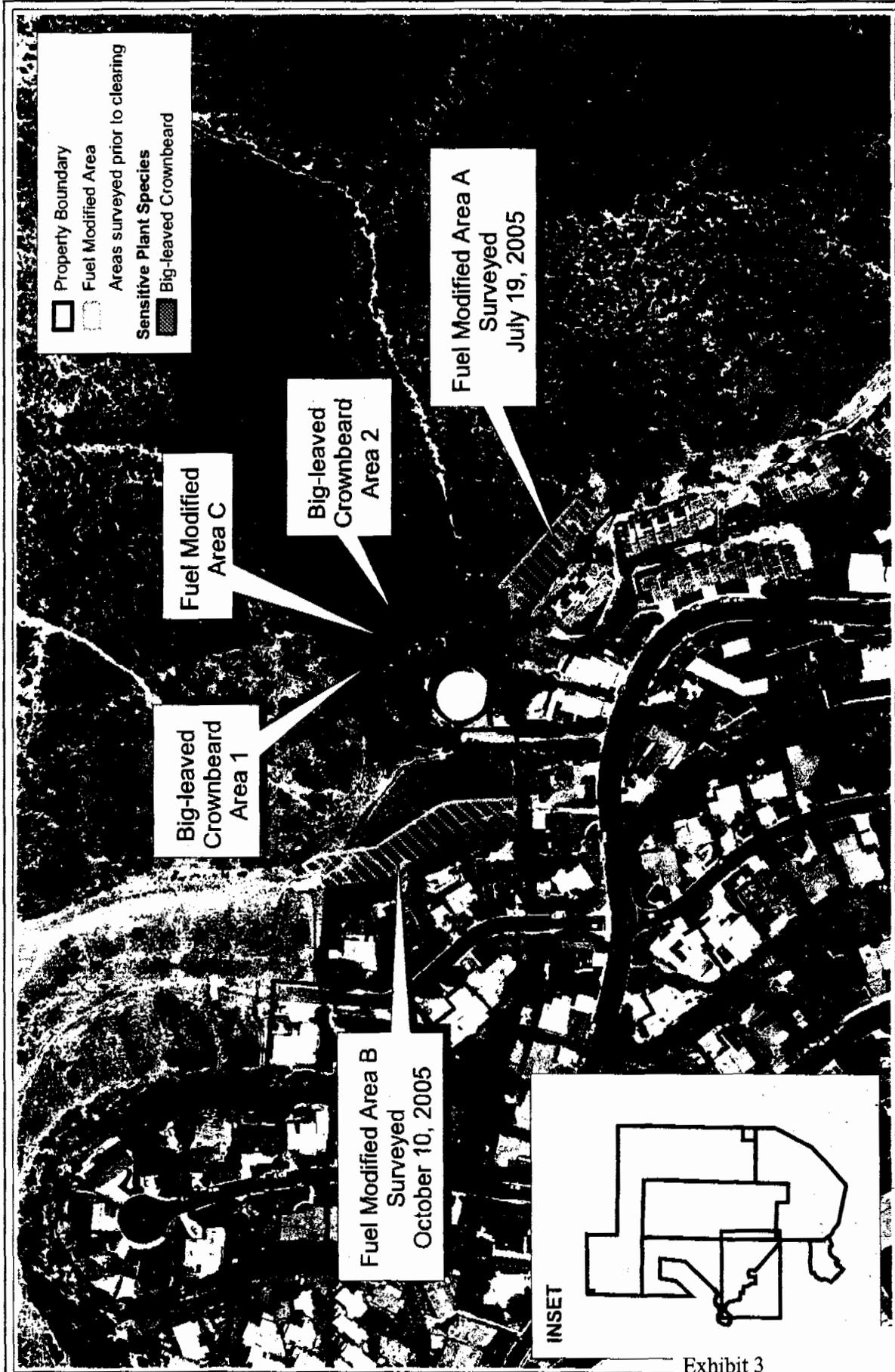
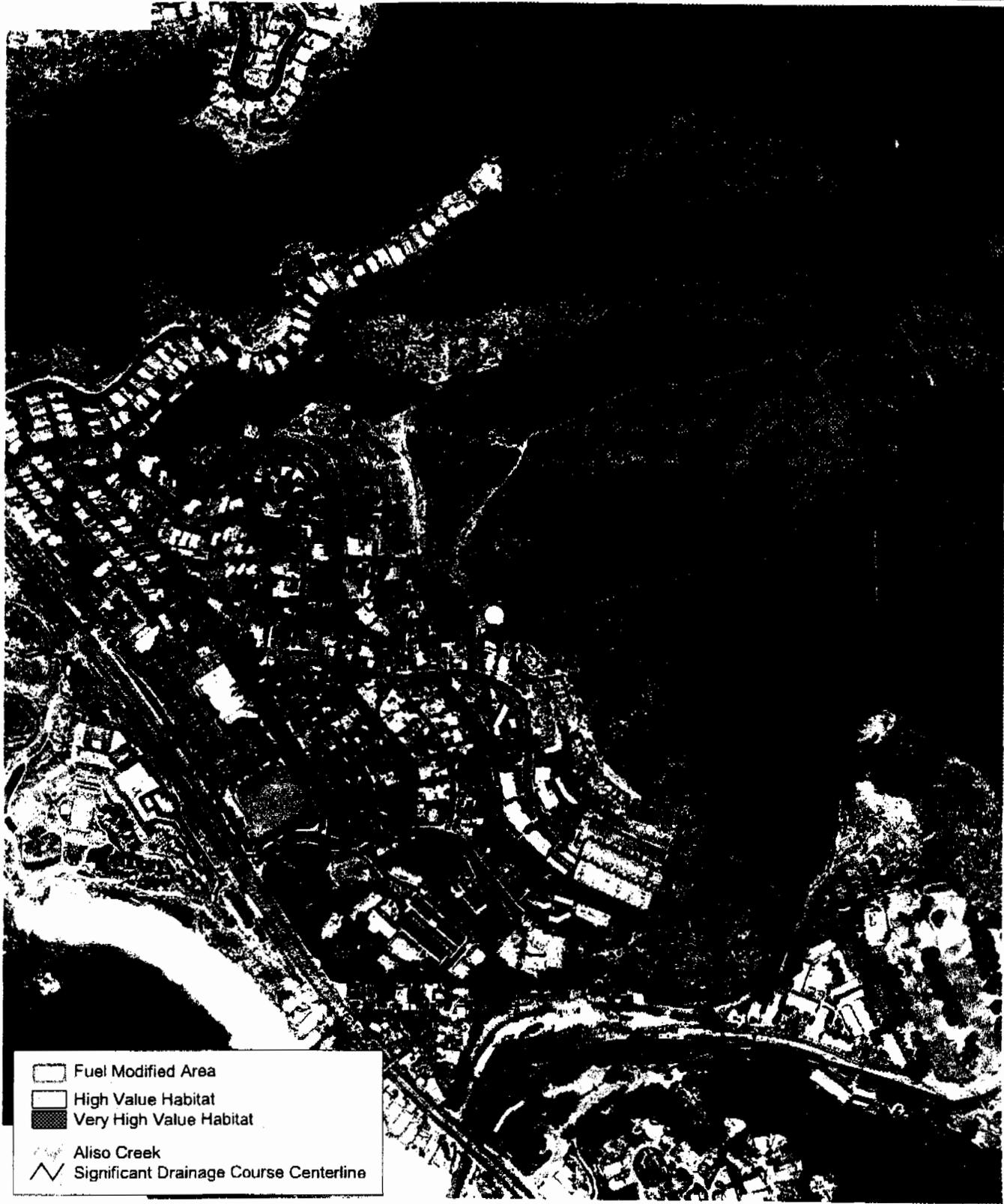


Figure 2
 Driftwood Estates/Aliso Creek
 Inn and Golf Course Property
 Fuel Modified Area



Source: Forms, 2004 (Aerial); PCR Services Corporation, 2005.





-  Fuel Modified Area
-  High Value Habitat
-  Very High Value Habitat
-  Aliso Creek
-  Significant Drainage Course Centerline

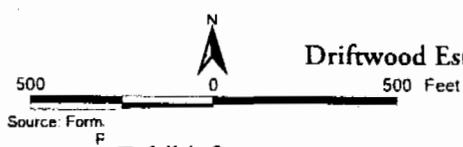


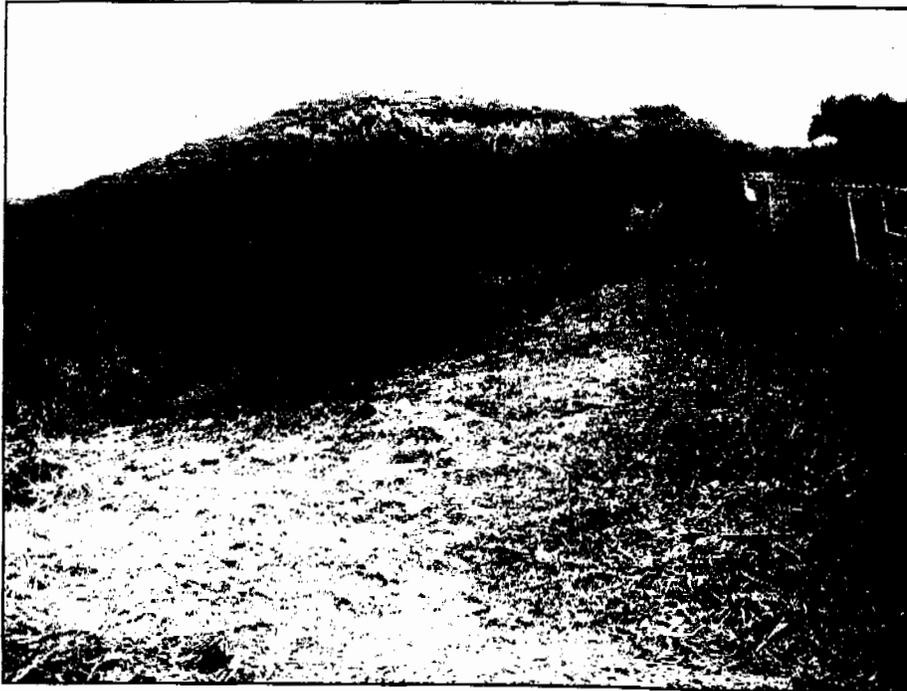
Figure 3
 Driftwood Estates/Aliso Creek Inn and Golf Course Property
 City-Delineated High Value and
 Very High Value Habitat Areas



Figure 4
 Driftwood Estates/Aliso Creek
 Inn and Golf Course Property
 Observed Locations of Big-Leaved Crownbeard



Photograph 1: Northeast facing view of the affected area. Photograph taken October 27, 2005.



Photograph 2: Southeast facing view of the affected area. Photograph taken October 27, 2005.





Photograph 3: Big-leaved crownbeard within intact maritime chaparral habitat. Photograph taken October 27, 2005. Note the gray-colored, dried leaves.



Photograph 4: Big-leaved crownbeard within intact maritime chaparral habitat. Photograph taken October 27, 2005.



CALIFORNIA COASTAL COMMISSION

45 FREMONT, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE (415) 904-5200
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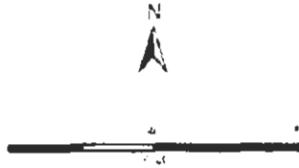


DRAFT

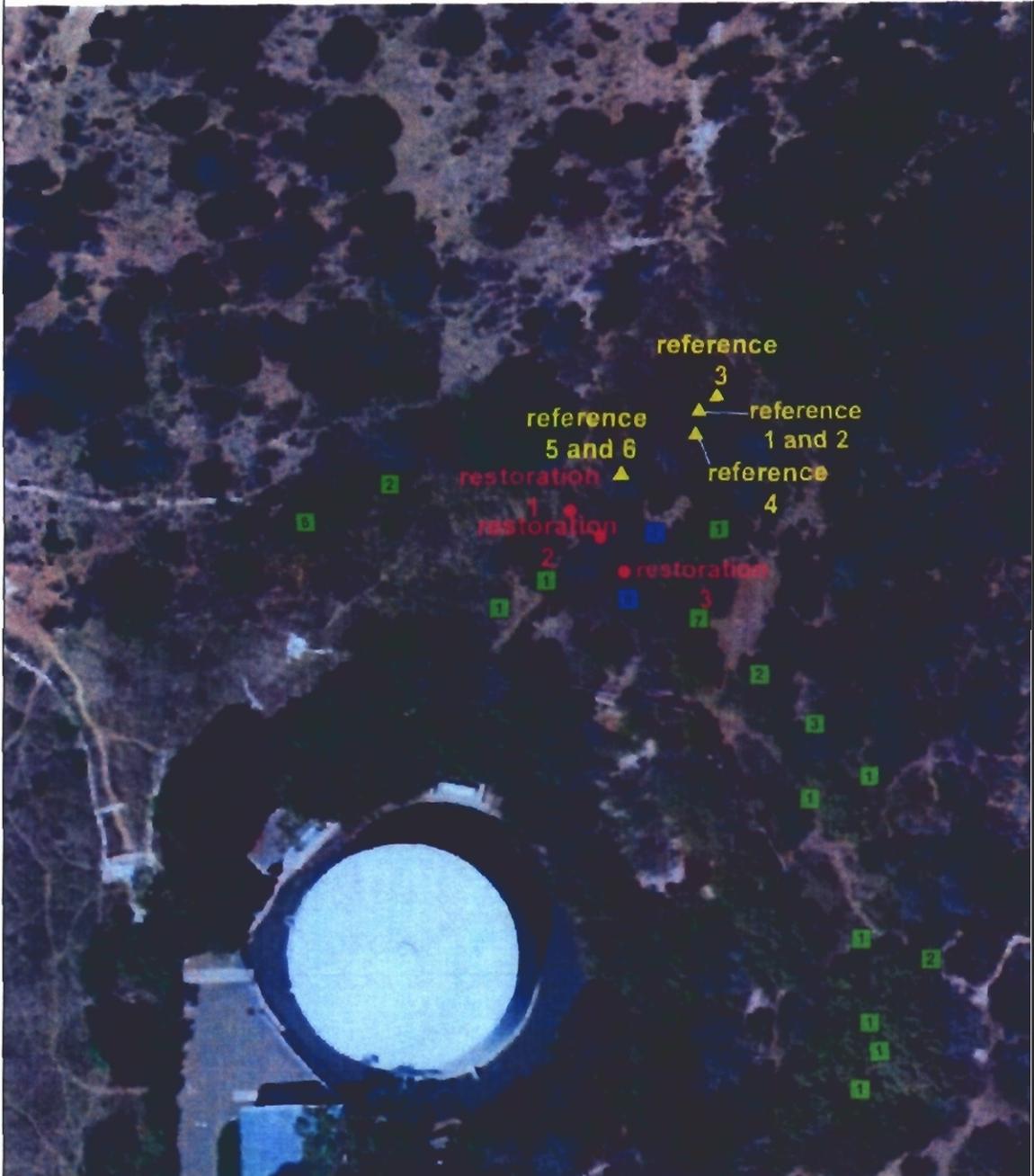
The Following exhibit is a draft map of the general restoration, mitigation, and reference site locations proposed by Athens Development AC, LLC. This map was not submitted as part of a Commission-issued order, nor was it submitted pursuant to a requirement of the Consent Restoration Order for this matter. This is provided for your information only to provide a rough pictorial representation of the locations discussed in the Staff Report. The final locations of all restoration and mitigation work to be performed pursuant to the proposed Consent Restoration Order will be determined through the Plans to be submitted for Commission approval under the terms of the proposed Consent Order. Commission staff has not deemed this draft document to be in compliance with Coastal Act resource protection policies or with the provisions of the Consent Order for this matter.

Legend

- ▲ Crownbeard Reference Sites
- Crownbeard Restoration Sites
- Acacia - Removable
- Acacia - Remain



DRIFTWOOD PROPERTIES, LLC
Crownbeard Sites
GLENN LUKOS ASSOCIATES
Regulatory Services





Photograph of area where Crownbeard was removed, sent to Commission staff from a concerned citizen on November 14, 2005.



Photograph of area where Crownbeard was removed, sent to Commission staff from Athens on June 28, 2006.

CALIFORNIA COASTAL COMMISSION

South Coast Area Office
200 Oceangate, Suite 1000
Long Beach, CA 90802-4302
(562) 590-5071



December 29, 2005

Martyn Hoffmann
The Athens Group
31106 Pacific Coast Highway
Laguna Beach, CA 92651

Re: Violation No. V-5-05-031

Property location: Assessor's Parcel Number 056-240-65, City of Laguna Beach, Orange County

Unpermitted Development: Removal of major vegetation

Dear Mr. Hoffmann:

I am writing to confirm that Commission staff has received the "Draft Restoration Plan For Temporary Impacts To Big-Leaved Crownbeard (*Verbesia Dissita*) Associated With Fuel Modification Activities ("Restoration Plan") prepared by Glen Lukos Associates on behalf of The Athens Group. The Restoration Plan was proposed by The Athens Group in order to affect resolution of unpermitted development that occurred on the subject property. Commission staff appreciates The Athens Group's prompt and thorough response to the concerns presented by the fuel modification activities.

The unpermitted development that occurred on the subject property, which is located within the coastal zone, consisted of the removal of major vegetation, including a state and federally listed threatened species, the Big-leaved Crownbeard. It is staff's understanding that two clumps of Crownbeard were cut and the stalks subsequently removed from the site. No coastal development permits were issued for the development. Pursuant to Section 30600 (a) of the Coastal Act, any person wishing to perform or undertake development in the coastal zone must obtain a coastal development permit, in addition to any other permit required by law. "Development" is defined, in relevant part, by Section 30106 of the Coastal Act as:

...the removal or harvest of major vegetation other than for agricultural purposes, kelp harvesting, and timber operations....

The removal of major vegetation, including in this situation a threatened plant species, constitutes development under the Coastal Act and, therefore, requires a coastal development permit.

In most cases, unpermitted development may be resolved administratively through restoration of any damaged resources. In order to facilitate resolution of this matter, The Athens Group submitted a proposed plan to restore the impacted Crownbeard. At this time, Commission staff is reviewing the Restoration Plan to determine whether implementation of the plan would accomplish sufficient restoration of the site. If Commission staff determines that any modifications or additions to the Restoration Plan are necessary, staff will notify The Athens

Group of the requested modifications. Upon receipt of a finalized proposed restoration plan, staff will have a more complete understanding of the restoration work proposed and will decide at that point what is the appropriate formal action to resolve this matter.

While we are confident that we can resolve this violation informally, we are required to remind you that Coastal Act Section 30809 gives the Executive Director of the Commission the authority to issue an order directing that person to cease and desist, and Coastal Act Section 30810 authorizes the Coastal Commission to issue a cease and desist order. A violation of a cease and desist order can result in civil fines of up to \$6,000 for each day in which the violation persists. In addition, we remind you that Sections 30803 and 30805 of the Coastal Act authorize the Commission to initiate litigation to seek injunctive relief and an award of civil fines in response to any violation of the Coastal Act. Also, Sections 30820(a)(1) and 30820(b) of the Coastal Act provide that any person who violates any provision of the Coastal Act may be subject to penalties.

Finally, the Executive Director of the Coastal Commission is authorized, after providing notice and the opportunity for a hearing as provided for in Section 30812 of the Coastal Act, to record a Notice of Violation against the subject property.

Thank you again for your prompt cooperation in resolving this matter. If you have any questions regarding this letter or the pending enforcement case, please feel free to contact me.

Sincerely,



Andrew Willis
District Enforcement Analyst

cc: **Lisa Haage, Chief of Enforcement, CCC**
Pat Veesart, Southern California Enforcement Team Leader, CCC
Teresa Henry, South Coast District Manager, CCC
Karl Schwing, Orange County Permitting Supervisor, CCC

CALIFORNIA COASTAL COMMISSION

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FAX (415) 904-5400
TDD (415) 597-5885



VIA CERTIFIED AND REGULAR MAIL
(Article No. 7002 2030 0002 6358 2666)

April 20, 2006

Mr. Martyn Hoffmann
The Athens Group
31106 Pacific Coast Highway
Laguna Beach, CA 92651

Subject: Notice of Intent to Record a Notice of Violation of the Coastal Act and to Commence Restoration Order Proceedings

Violation No.: V-5-05-031

Location: Vacant lot adjacent to Driftwood Drive in Laguna Beach, Orange County; APN 056-240-65

Violation Description: Unpermitted removal of major vegetation including threatened Big-leaved Crownbeard

Dear Mr. Hoffman:

The purpose of this letter is to notify you of my intent, as the Executive Director of the California Coastal Commission ("Commission"), to record a Notice of Violation of the Coastal Act and to commence proceedings for issuance of a Restoration Order to address unpermitted development including, but not limited to the removal of major vegetation including a state and federally listed threatened species, Big-leaved Crownbeard (*Verbesina dissita*). The unpermitted development activities occurred on a portion of a 16.9-acre property located at the northern terminus of Driftwood Drive in the City of Laguna Beach in Orange County ("property"). The property, identified by APN 056-240-65, is managed by the Athens Group.

The purpose of these enforcement proceedings is to obtain a Restoration Order, addressing unpermitted development on the property by directing you to restore the

matter to protect prospective purchasers until the Coastal Act violation on the property has been resolved.

Violation History

In October 2005, Commission staff received a report that vegetation removal had occurred on the property. Upon further investigation, Commission staff confirmed that vegetation, including two clumps of Big-leaved Crownbeard totaling approximately 1341 square feet, had been cut and portions of the plants had been removed from the site. No coastal development permits were issued for the development. Pursuant to Section 30600 (a) of the Coastal Act, any person wishing to perform or undertake development in the coastal zone must obtain a coastal development permit, in addition to any other permit required by law. "Development" is defined, in relevant part, by Section 30106 of the Coastal Act as:

...the removal or harvest of major vegetation other than for agricultural purposes, kelp harvesting, and timber operations...

The removal of major vegetation, which in this case includes removal of a threatened plant species, constitutes development under the Coastal Act and, therefore, requires a coastal development permit.

Notice of Violation

The Commission's authority to record a Notice of Violation is set forth in Section 30812 of the Coastal Act, which states the following:

Whenever the executive director of the Commission has determined, based on substantial evidence, that real property has been developed in violation of this division, the executive director may cause a notification of intention to record a notice of violation to be mailed by regular and certified mail to the owner of the real property at issue, describing the real property, identifying the nature of the violation, naming the owners thereof, and stating that if the owner objects to the filing of a notice of violation, an opportunity will be given to the owner to present evidence on the issue of whether a violation has occurred.

I am issuing this Notice of Intent to record a Notice of Violation because, as discussed above, unpermitted development has occurred at the property, in violation of the Coastal Act. **If you object to the recordation of a Notice of Violation in this matter and wish to present evidence on the issue of whether a violation has occurred, you must respond in writing, to the attention of Christine Chestnut using the address provided on the letterhead within twenty days of the postmarked mailing of this notice, or by May 10, 2006.** If you fail to object within that twenty-day period, we shall record the Notice of Violation in the Los Angeles County recorders' office pursuant to Section 30812 of the Coastal Act.

Restoration Order

Section 30811 of the Coastal Act authorizes the Commission to order restoration of a site as follows:

In addition to any other authority to order restoration, the commission...may, after a public hearing, order restoration of a site if it finds that the development has occurred without a coastal development permit from the commission...the development is inconsistent with this division, and the development is causing continuing resource damage.

I have determined that the specified activities meet the criteria of Section 30811 of the Coastal Act, based on the following:

- 1) The cited development is unpermitted pursuant to Section 30600(a) of the Coastal Act and has occurred on the property without a CDP.
- 2) The unpermitted development is inconsistent with Coastal Act Section 30240 (protection of environmentally sensitive habitat).
- 3) The unpermitted development is causing continuing resource damage, as defined by Section 13190 of the Commission's regulations. The unpermitted development has impacted environmentally sensitive habitat area containing a state and federally listed threatened species. Such impacts meet the definition of damage provided in Section 13190(b): "any degradation or other reduction in quality, abundance, or other quantitative or qualitative characteristic of the resource as compared to the condition the resource was in before it was disturbed by unpermitted development." The impacts from the unpermitted development continue to occur at the property; therefore, the damage that said development is causing to resources protected by the Coastal Act is continuing.

For the reasons stated above, I have decided to commence a Restoration Order proceeding before the Commission. The procedures for the issuance of Restoration Orders are described in Sections 13190 through 13197 of the Commission's regulations.

Please be advised that Coastal Act Sections 30803 and 30805 authorize the Coastal Commission to initiate litigation to seek injunctive relief and an award of civil penalties in response to any violation of the Coastal Act. Coastal Act Section 30820(a) provides that any person who violates any provision of the Coastal Act may be subject to a penalty not to exceed \$30,000. Further, Section 30820(b) states that, in addition to any other penalties, any person who "knowingly and intentionally" performs any development in violation of the Coastal Act can be subject to a civil penalty of up to \$15,000 for each day in which the violation persists. Additional penalties of up to \$6,000 per day can be imposed if a cease and desist or restoration order is violated. Section 30822 further

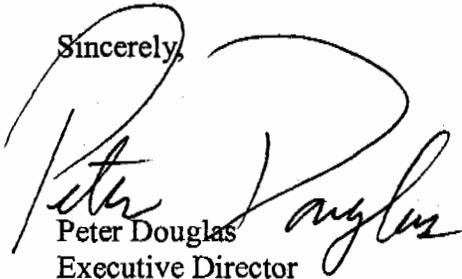
provides that exemplary damages may also be imposed for knowing and intentional violations of the Coastal Act or of any orders issued pursuant to the Coastal Act.

In accordance with Section 13181(a) and 13191(a) of the Commission's regulations, you have the opportunity to respond to the Commission staff's allegations as set forth in this notice of intent to commence Cease and Desist Order and Restoration Order proceedings by completing the enclosed Statement of Defense form. **The Statement of Defense form must be returned to the Commission's San Francisco office, directed to the attention of Christine Chestnut, no later than May 10, 2006.**

Commission staff has tentatively scheduled the hearing for the proposed Restoration Order (and for the proposed Notice of Violation, should you additionally request **in writing** a hearing on this issue) for the July 12-14, 2006 Commission meeting. If you have any questions regarding this letter or the enforcement case, please call Christine Chestnut at (415) 904-5294 or send correspondence to her attention using the address provided on the letterhead.

We are very encouraged by the discussions we have had with you and hope to ultimately resolve this violation through a consent agreement. We appreciate your cooperation in this matter and look forward to continuing to work with you to reach an amicable resolution of the violation.

Sincerely,



Peter Douglas
Executive Director

Encl.: Statement of Defense Form for Cease and Desist Order

cc (without Encl): Lisa Haage, Chief of Enforcement
Alex Helperin, Staff Counsel
Pat Veesart, Southern California Enforcement Team Leader
Andrew Willis, Enforcement Analyst
Christine Chestnut, Headquarters Enforcement Office

CALIFORNIA COASTAL COMMISSION

45 FREMONT, SUITE 2000
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VOICE AND TDD (415) 904-5200
FAX (415) 904-5400

**STATEMENT OF DEFENSE FORM**

DEPENDING ON THE OUTCOME OF FURTHER DISCUSSIONS THAT OCCUR WITH THE COMMISSION ENFORCEMENT STAFF AFTER YOU HAVE COMPLETED AND RETURNED THIS FORM, (FURTHER) ADMINISTRATIVE OR LEGAL ENFORCEMENT PROCEEDINGS MAY NEVERTHELESS BE INITIATED AGAINST YOU. IF THAT OCCURS, ANY STATEMENTS THAT YOU MAKE ON THIS FORM WILL BECOME PART OF THE ENFORCEMENT RECORD AND MAY BE USED AGAINST YOU.

YOU MAY WISH TO CONSULT WITH OR RETAIN AN ATTORNEY BEFORE YOU COMPLETE THIS FORM OR OTHERWISE CONTACT THE COMMISSION ENFORCEMENT STAFF.

This form is accompanied by a notice of intent to initiate restoration order proceedings before the commission. This document indicates that you are or may be responsible for or in some way involved in either a violation of the commission's laws or a commission permit. The document summarizes what the (possible) violation involves, who is or may be responsible for it, where and when it (may have) occurred, and other pertinent information concerning the (possible) violation.

This form requires you to respond to the (alleged) facts contained in the document, to raise any affirmative defenses that you believe apply, and to inform the staff of all facts that you believe may exonerate you of any legal responsibility for the (possible) violation or may mitigate your responsibility. This form also requires you to enclose with the completed statement of defense form copies of all written documents, such as letters, photographs, maps, drawings, etc. and written declarations under penalty of perjury that you want the commission to consider as part of this enforcement hearing.

You should complete the form (please use additional pages if necessary) and return it **no later than May 10, 2006** to the Commission's enforcement staff at the following address:

**Christine Chestnut
Headquarters Enforcement Analyst
California Coastal Commission
45 Fremont Street, Suite 2000
San Francisco, California 94105-2219**

If you have any questions, please contact **Christine Chestnut** at **(415) 904-5294**.

4. **Other facts which may exonerate or mitigate your possible responsibility or otherwise explain your relationship to the possible violation (be as specific as you can; if you have or know of any document(s), photograph(s), map(s), letter(s), or other evidence that you believe is/are relevant, please identify it/them by name, date, type, and any other identifying information and provide the original(s) or (a) copy(ies) if you can:**

5. **Any other information, statement, etc. that you want to offer or make:**

6. Documents, exhibits, declarations under penalty of perjury or other materials that you have attached to this form to support your answers or that you want to be made part of the administrative record for this enforcement proceeding (Please list in chronological order by date, author, and title, and enclose a copy with this completed form):

Endangered or Threatened Status for Four Southern Maritime Chaparral
Plant Taxa from Coastal Southern California and Northwestern Baja
California, Mexico

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The U.S. Fish and Wildlife Service (Service) determines endangered status pursuant to the Endangered Species Act of 1973, as amended (Act), for two plants--*Arctostaphylos glandulosa* ssp. *crassifolia* (Del Mar manzanita) and *Chorizanthe orcuttiana* (Orcutt's spineflower) throughout their historic range in southwestern California and northwestern Baja California, Mexico; and threatened status for two plants--*Verbesina dissita* (big-leaved crown-beard) and *Baccharis vanessae* (Encinitas baccharis) throughout their historic range in southwestern California and northwestern Baja California, Mexico. These four taxa are threatened by one or more of the following--trampling by farm workers or recreational activities; fuel modification; competition from non-native plant species; and habitat destruction due to residential, agricultural, commercial, and recreational development. Several of these plant taxa are also threatened by a risk of extinction from naturally occurring events due to their small population size and limited distribution. This rule implements the Federal protection and recovery provisions afforded by the Act for these four plants.

EFFECTIVE DATE: November 6, 1996.

ADDRESSES: The complete file for this rule is available for public inspection, by appointment, during normal business hours at the U.S. Fish and Wildlife Service, Carlsbad Field Office, 2730 Loker Avenue West, Carlsbad, California 92008.

FOR FURTHER INFORMATION CONTACT: Fred Roberts, Botanist (see ADDRESSES section) (telephone: 619/431-9440).

SUPPLEMENTARY INFORMATION:

Background

Southern maritime chaparral is a low, fairly open chaparral typically dominated by *Ceanothus verrucosus* (wart-stemmed ceanothus), *Xylococcus bicolor* (mission manzanita), *Adenostoma fasciculatum* var. *obtusifolium* (chamise), *Quercus dumosa* (Nuttall's scrub oak), *Cneoridium dumosum* (bush rue), *Rhamnus crocea* (red berry), *Yucca schidigera* (Mojave yucca), and occasionally *Dendromecon rigida* (bush poppy) (Holland 1986; Todd Kehler-Wolf, Plant Ecologist, California Department of Fish and Game (CDFG), pers. comm., 1993; Dan Kelly and Patricia Gordon-Reedy, biologists, OGDEN, pers. comm., 1993). Southern maritime chaparral is a plant association that occurs only in coastal southern California along the immediate coast of San Diego and Orange counties and northwestern Baja California, Mexico. The distribution of southern maritime chaparral in Orange County is disjunct, and the species composition is slightly different from that found in San Diego County and Mexico (Gray and Bramlet 1992).

Southern maritime chaparral is considered to be a unique and

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threatened plant community. It has been estimated that about 120 hectares (ha) (300 acres (ac)) of southern maritime chaparral occurred historically in Orange County (U.S. Fish and Wildlife Service (USFWS), unpublished data), while about 8,400 ha (21,000 ac) of southern maritime chaparral occurred historically in San Diego County (Oberbauer and Vanderwier 1991). Currently, there are an estimated 60 ha (150 ac) of southern maritime chaparral in Orange County (Todd Kehler-Wolf, pers. comm., 1993) and between 600 and 1,480 ha (1,500 and 3,700 ac) in San Diego County (Oberbauer and Vanderwier 1991; OGDEN 1993; Dave Hogan, Southwest Center for Biological Diversity, in litt., 1993). This represents an 82 to 93 percent decline in habitat in southern California, largely due to agricultural conversion and urbanization. Much of the remaining 10 to 20 percent of the United States portion of southern maritime chaparral is located on Carmel Mountain, Torrey Pines State Park, and in the cities of Carlsbad and Encinitas in San Diego County. The distribution of southern maritime chaparral and related associations has also declined significantly in Baja California, Mexico, for many of the same reasons.

One of the four plant taxa to be listed by this final rule, *Chorizanthe orcuttiana*, is primarily restricted to weathered sandstone bluffs in association with or in microhabitats within southern maritime chaparral. This species is endemic to south-central and southern coastal San Diego County, California. A second taxon, *Arctostaphylos glandulosa* ssp. *crassifolia*, is also primarily associated with southern maritime chaparral in San Diego County, California. It also occurs in disjunct populations in northwestern Baja California, Mexico, at least as far south as Mesa el Descanseo, 40 kilometers (km) (25 miles (mi)) north of Ensenada.

The remaining two taxa, *Verbesina dissita* and *Baccharis vanessae*, are frequently associated with southern maritime chaparral but also extend into other plant communities. *Verbesina dissita* is restricted to rugged coastal canyons in association with San Onofre breccia-derived soils in the southern maritime chaparral of southern Orange County, California. This taxon also occurs in limited numbers in Venturan-Diegan transitional coastal sage scrub (Gray and Bramlet 1992), Diegan coastal sage scrub, and southern mixed chaparral (Holland 1986). *Verbesina dissita* occurs disjunctly in similar vegetation associations from Punta Descanso south to San Telmo in northwestern Baja California, Mexico. *Baccharis vanessae* occurs in southern maritime chaparral in the vicinity of Encinitas, central San Diego County, California, and extends inland to Mount Woodson and Poway where it is associated with dense southern mixed chaparral. One population of this plant occurs in the Santa Margarita Mountains of northern San Diego County. Two of the four taxa are found below 250 meters (m) (820 feet (ft)) in elevation in the United States. *Arctostaphylos glandulosa* ssp. *crassifolia* reaches 730 m (2,400 ft) elevation in Mexico. *Baccharis vanessae* is known to occur at 880 m (2,890 ft) in elevation on Mount Woodson.

While three of the four plant taxa are largely restricted to the United States, 85 percent of the known populations of *Verbesina dissita* are known from northwestern Baja California, Mexico. Although the status of this species and its habitat in Mexico is not well documented, over 20 percent of the populations occurring in Mexico have been extirpated. Agricultural conversion, resort and residential

development, and wide fuel breaks and slash and burn practices have already affected and continue to contribute to the decline of *Verbesina dissita* in Mexico (CDFG 1990, Oberbauer 1992).

The natural plant communities of coastal Orange and San Diego Counties have undergone significant changes resulting from both human-caused activities and natural events. The rapid urbanization of southern Orange County and south-central San Diego County has already eliminated a significant portion of the southern maritime chaparral and the four plant taxa considered herein. Fire also plays an important role in determining southern California plant community distribution and composition. The advent of widespread urbanization and the disruption in natural fire cycles potentially threatens the remaining southern maritime chaparral. Populations of these four taxa have been subjected to a considerable degree of fragmentation.

Discussion of the Four Taxa

Arctostaphylos glandulosa ssp. *crassifolia* (Del Mar manzanita), a member of the heath family (Ericaceae), is one of six recognized subspecies occurring in California and northwest Baja California, Mexico (Wells 1987, 1993). The subspecies is an erect shrub, generally 1 to 1.2 m (3.3 to 4 ft) tall, but occasionally higher when introgressed (influenced by other subspecies).

This taxon is distinguished from other subspecies of *Arctostaphylos glandulosa* by its shorter stature (other subspecies are up to 2.5 m (8.2 ft) tall), and by its dark gray-green leaves that are glabrate above and tomentulose beneath. The branchlets and leaf-like bracts are non-glandular and tomentulose with scattered long hairs or bristles (Wells 1993). Generally, *A. glandulosa* (Eastwood manzanita) is a relatively open, smooth, dark red-barked shrub characterized by a basal burl and scarcely leaf-like bracts that are shorter than the hairy flower-stalks. Four of six subspecies of *A. glandulosa* lack non-glandular, tomentulose hairs and scattered white bristles on the branchlets, bracts and leaves. Of the remaining two taxa, *A. g.* ssp. *mollis* of the western Transverse Ranges has more uniformly distributed, long, white bristles and bright green, smooth and shiny leaves, while *A. g.* ssp. *glaucomollis* of the San Gabriel and San Bernardino Mountains lacks leaf-like bracts (Wells 1993).

Arctostaphylos glandulosa ssp. *crassifolia* was first described by Willis Jepson (1922) based on a specimen he collected in Del Mar, California. In 1925, Jepson placed Del Mar manzanita under the name *Arctostaphylos tomentosa* var. *crassifolia* (Knight 1981). This name was used by Howard McMinn (1939), who stated that Del Mar manzanita "seems very closely related to *A. glandulosa* var. *cushingiana* but the more truncate leaf-bases, the usually more tomentulose lower leaf-surfaces, and distribution seem sufficient to maintain it as a variety of *A. tomentosa*." J.E. Adams, in his 1940 treatment of the genus *Arctostaphylos*, transferred var. *crassifolia* to *A. glandulosa* as in Jepson's original treatment (Knight 1981).

Philip Wells (1968) stated that "other morphological variants of the *A. glandulosa* complex have largely allopatric (do not overlap) geographic distributions and are recognized as subspecies." Accordingly, Wells applied the name *A. glandulosa* ssp. *crassifolia* to the Del Mar manzanita. Subsequent taxonomic review (Munz 1959, 1974) upheld this treatment. Walter Knight (1981) reviewed the morphology and summarized the taxonomic history of *A. g.* ssp. *crassifolia*. While the majority of Knight's discussion in that article supported the validity

of *A. g. ssp. crassifolia*, Knight concluded that this taxon should not be recognized. He stated that *A. g. ssp. crassifolia* was a product of hybridization between *A. glandulosa* and other manzanita species in the area. However, Knight's conclusions were not widely accepted by botanists in San Diego County (Beauchamp 1986; Thomas Oberbauer, Planner, County of San Diego, pers.).

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comms., 1993, 1994). Knight did not offer support, nor discuss potential parentage for considering *A. g. ssp. crassifolia* as a hybrid entity. *Arctostaphylos glandulosa ssp. crassifolia* is allopatric with other manzanita taxa, except in Mexico, where the range is partly sympatric (overlapping) with *A. g. ssp. zacaensis* (Wells 1987). Additionally, the morphological characters of *A. g. ssp. crassifolia* do not appear to be intermediate with any other species within the vicinity of its range (McMinn 1939, Munz 1974, Wells 1993, Roberts 1994).

Both Knight and Wells were asked to examine populations of manzanita along coastal San Diego County in March 1986. From these field observations, Knight revised his position and agreed with the classical treatment, concluding that *Arctostaphylos glandulosa ssp. crassifolia* was distinct (T. Oberbauer, pers. comms., 1993, 1994; Jim Bartel, USFWS, pers. comm., 1994). Wells reaffirmed the distinctness of *A. g. ssp. crassifolia*, stating "(A. g.) *ssp. crassifolia* is one of the more consistent and well-defined taxa within the variable *A. glandulosa* complex, and (*A. g. ssp.*) *crassifolia* has a discrete distribution, allopatric from other taxa" (Wells 1987, Sweetwater Environmental Biologists (SEB) 1993b).

Arctostaphylos glandulosa ssp. crassifolia is restricted to sandstone terraces and bluffs from Carlsbad south to Torrey Pines State Park, extending inland to Rancho Santa Fe and Del Mar Mesa in San Diego County, California. An additional population has been reported just south of the San Dieguito River southwest of Lake Hodges. This species has been reported from five localities in northwestern Baja California, Mexico, from just east of Tijuana along the United States border, to Cerro el Coronel and Mesa Descanseo 40 km (25 mi) south of the United States border. These populations may no longer be extant due to considerable urban and agricultural development in the Tijuana vicinity (Roberts 1992). The most recent collection in the San Diego Museum of Natural History was made by Reid Moran in 1982.

About 1982, approximately 16,600 to 17,600 individuals of *Arctostaphylos glandulosa ssp. crassifolia* were known to be distributed over about 26 population centers (Roberts 1992, SEB 1993b, OGDEN 1995a). A significant number of these populations have been severely impacted since then. For example, in 1987, one population of nearly 500 individuals near San Dieguito Creek and the surrounding southern maritime chaparral habitat was cleared and converted to agriculture. Cultivation at this site was active for one season and has not been continued (T. Oberbauer, pers. comm., 1992). Currently, about 9,400 to 10,300 individuals, scattered roughly throughout the historic distribution of the species in San Diego County, are known to be extant (Roberts 1993, SEB 1993b, OGDEN 1995a). About 75 percent of all remaining individuals are located within six concentrations. The majority of the 26 populations are found on private land, four occur in State, county or local parks, and none are known from Federal lands. The number of individuals in Baja California, Mexico, is not known but

is likely to be smaller than in the United States, based on the limited availability of habitat.

Four populations of *Arctostaphylos glandulosa* totaling approximately 3,000 individuals in the vicinity of Miramar Reservoir have been attributed to *A. g.* ssp. *crassifolia*, but Wells (pers. comm., 1992) maintains that these plants are intermediate with other subspecies of *A. glandulosa* and can not be definitely placed. Later inclusion of these populations in *A. g.* ssp. *crassifolia* would not significantly alter the findings of this rule. Nearly 50 percent of the individuals known from the vicinity of Miramar Reservoir in 1982 were eliminated by the Scripps Ranch development between 1989 and 1992.

Baccharis vanessae (*Encinitas baccharis*), a member of the sunflower family (Asteraceae), is a dioecious broom-like shrub, 0.5 to 1.3 m (1.6 to 4.3 ft) tall. It was discovered by Mitchel Beauchamp in October 1976 in southern maritime chaparral on Eocene sandstones along the north side of Encinitas Boulevard in Encinitas. The species was later described by Beauchamp (1980). *Baccharis vanessae* is distinguished from other members of the genus by its filiform leaves and delicate phyllaries which are reflexed at maturity (Beauchamp 1980, Munz 1974).

As currently understood, the historical distribution of this species included 19 natural populations scattered from Encinitas east through the Del Dios highlands and Lake Hodges area to Mount Woodson and south to Poway and Carmel Mountain in San Diego County, California. Fourteen of these populations are still extant and contain approximately 2,000 individuals in total (CDFG 1992). Four of these populations, however, contain fewer than six individuals each. An additional disjunct individual was discovered on the western slopes of Carmel Mountain in 1993 (D. Hogan, in litt., 1993). This location harbors the southernmost known population. A single transplanted population of 34 individuals was established in San Dieguito Park, but this population has not persisted (Hall 1987). The majority of the remaining populations are on private lands.

Chorizanthe orcuttiana (Orcutt's spineflower) was first described by Charles Parry in 1884 based on a specimen collected by Charles Orcutt at Point Loma, San Diego County, in the same year (Parry 1884). *Chorizanthe orcuttiana* is a low, yellow-flowered annual of the buckwheat family (Polygonaceae) restricted to sandy soils. It is distinguished from other members of the genus by its prostrate form, campanulate three-toothed involucre and involucre awns that are hooked near the tip (Reveal 1989).

Historically, *Chorizanthe orcuttiana* is known from 10 separate localities in San Diego County from Point Loma near San Diego (including the U.S. Naval Reservation), Del Mar, Kearney Mesa and Encinitas (CDFG 1992). Only two populations have been seen in recent years. Allen reported 50 to 100 individuals at Torrey Pines State Park in 1987 (CDFG 1992). However, this population has not been relocated in the last several years, possibly due to changing plant species composition and density as result of a 1984 burn. The species was thought to be extinct until a new population was discovered in 1991 at Oak Crest Park in Encinitas (D. Hogan, in litt., 1991). This population numbered fewer than 40 individuals in 1993 and fewer than 10 individuals in 1994, and it is distributed over a relatively small area (about 4 square m (43 square ft)) (unpublished USFWS data). The number of individuals varies widely from year to year because the success of germination is highly dependent on factors such as rainfall, which often differ significantly from one year to the next in southern California.

Verbesina dissita (big-leaved crown-beard) was first described by Asa Gray (1885) based on a collection made by Charles Orcutt at Ensenada, Baja California, Mexico, in September 1884. The taxon apparently was first collected in the United States at Arch Beach in South Laguna, Orange County, in 1903 by Mrs. M.F. Bradshaw (Hall 1907).

Verbesina dissita, a member of the sunflower family (Asteraceae), is a low, semi-woody perennial shrub with bright yellow flowers. This species grows from 0.5 to 1.0 m (1.6 to 3.3 ft) tall and has distinctive scabrid leaves. *Verbesina dissita* is distinguished from other members of the genus in California and Baja California, Mexico, by its naked

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achenes and broad involucre (Munz 1974).

Verbesina dissita is found on rugged hillsides in dense maritime chaparral from Laguna Beach in Orange County south to the San Telmo area east of Cabo Colonet in Baja California, Mexico. In California it is known from two population centers less than 3.2 km (2 mi) apart. Because of the low growth habit and preference for understory locations, the population size of this taxon is difficult to estimate. The United States populations have been estimated to contain several thousand plants (CDFG 1992, Marsh 1992). Historically, this taxon has been recorded from 23 separate locations in Mexico. Of the Mexican localities, over 20 percent, all north of Punta Santo Tomas, have been eliminated. Nearly all known populations are on private land.

Previous Federal Action

Action by the Federal government on two of the four plant taxa contained herein began pursuant to section 12 of the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 153 et seq.). Section 12 directed the Secretary of the Smithsonian Institution to prepare a report on those plants considered to be endangered, threatened or extinct. This report, designated as House Document No. 94-51, was presented to Congress on January 9, 1975, and included *Arctostaphylos glandulosa* ssp. *crassifolia* and *Chorizanthe orcuttiana* as endangered. The Service published a notice in the July 1, 1975, Federal Register (40 FR 27823) of its acceptance of the report of the Smithsonian Institution as a petition within the context of section 4(c)(2) (petition provisions are now found in section 4(b)(3) of the Act) and its intention thereby to review the status of the plant taxa named therein. On June 16, 1976, the Service published a proposal in the Federal Register (42 FR 24523) to determine approximately 1,700 vascular plants to be endangered species pursuant to section 4 of the Act. *Chorizanthe orcuttiana* and *Arctostaphylos glandulosa* ssp. *crassifolia* were included in the June 16, 1976, Federal Register notice.

General comments received in response to the 1976 proposal were summarized in an April 26, 1978, Federal Register notice (43 FR 17909). The Endangered Species Act Amendments of 1978 required that all proposals already over two years old be withdrawn. A 1-year grace period was given to those proposals already more than two years old. In the December 10, 1979, Federal Register (44 FR 70796), the Service published a notice of withdrawal of the portion of the June 8, 1976, proposal that had not been made final, along with four other proposals that had expired.

The Service published an updated notice of review of plants on December 15, 1980 (45 FR 82480). This notice included *Baccharis vanessae* and *Chorizanthe orcuttiana* as category 1 taxa. Category 1 taxa are those taxa for which substantial information on biological vulnerability and threats are available to support preparation of listing proposals. On November 28, 1983, the Service published in the Federal Register a supplement to the Notice of Review (48 FR 53840), in which *B. vanessae* and *C. orcuttiana* were reclassified from category 1 to category 2. Category 2 candidates were taxa for which data in the Service's possession indicated listing was possibly appropriate but for which substantial information on biological vulnerability and threats was not known or on file to support the preparation of proposed rules. The designation of category 2 species was not included in the latest notice of review (February 28, 1996; 61 FR 7596). *Arctostaphylos glandulosa* ssp. *crassifolia* was not included in either the 1980 review list or the 1983 supplement.

The plant notice was again revised on September 27, 1985 (50 FR 39526), and *Arctostaphylos glandulosa* ssp. *crassifolia* was listed as a category 3B taxon. Category 3B taxa were those taxa that, based upon current taxonomic understanding, did not represent distinct taxa under the Act's definition of species (the designation of category 3B has also been discontinued). This change reflected the questionable validity of the taxon as presented by Knight (1981). The taxonomy of *Arctostaphylos glandulosa* ssp. *crassifolia* was subsequently reevaluated, and the plant was included as a category 2 taxon in the February 21, 1990, Plant Notice of Review (55 FR 6184), based on the work of Wells (1987). In this same notice, *Baccharis vanessae* and *Chorizanthe orcuttiana* were reevaluated and included as category 1 species based on information contained in status reports prepared in conjunction with State listing as endangered. The 1990 review included *C. orcuttiana* as a category 1* candidate, indicating that this species was possibly extinct. Based on additional information on threats and vulnerability, the Service elevated *A. g.* ssp. *crassifolia* and *C. orcuttiana* to category 1 and added *Verbesina dissita* as a category 1 candidate in the September 30, 1993, Notice of Review (58 FR 51144).

Section 4(b)(3)(B) of the Act requires the Secretary to make certain findings on pending petitions within 12 months of their receipt. Section 2(b)(1) of the 1982 amendments further requires that all petitions pending on October 13, 1982, be treated as having been newly submitted on that date. This was the case for *Arctostaphylos glandulosa* ssp. *crassifolia* and *Chorizanthe orcuttiana* because the 1975 Smithsonian report had been accepted as a petition. On October 13, 1983, the Service found that the petitioned listing of these species was warranted, but precluded by other pending listing actions pursuant to section 4(b)(3)(B)(iii) of the Act. Notification of this finding was published in the Federal Register on January 20, 1984 (49 FR 2485). Such a finding requires the petition to be recycled, pursuant to section 4(b)(3)(C)(i) of the Act. The finding was reviewed in October of 1984, 1985, 1987, 1988, 1989, 1990, 1991, and 1992. Publication of the proposed rule constituted the warranted finding for these taxa.

On December 14, 1990, the Service received a petition dated December 5, 1990, from Mr. David Hogan of the San Diego Biodiversity Project, to list *Baccharis vanessae* as an endangered species. The petition also requested the designation of critical habitat. The Service evaluated the petitioner's requested action and published a 90-day finding on August 30, 1991 (56 FR 42968), stating that substantial information had been presented that the requested actions concerning

Baccharis vanessae may be warranted.

A proposed rule to list *Arctostaphylos glandulosa* ssp. *crassifolia*, *Baccharis vanessae*, and *Chorizanthe orcuttiana* as endangered and *Verbesina dissita* as threatened was published in the Federal Register on October 1, 1993 (58 FR 51302). That proposed rule also included *Dudleya blochmaniae* ssp. *brevifolia* (short-leaved dudleya) to be listed as endangered and *Corethrogyne filaginifolia* var. *linifolia* (Del Mar sand-aster) to be listed as a threatened taxon. The proposals to list those two taxa are withdrawn and addressed in a document published concurrently in the proposed rule section of this issue of the Federal Register.

The processing of this final rule follows the Service's listing priority guidance published in the Federal Register on May 16, 1996 (61 FR 24722). The guidance clarifies the order in which the Service will process rulemakings following two related events: 1) the lifting, on April 26, 1996, of the moratorium on final listings imposed on April 10, 1995 (Public Law

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104-6), and 2) the restoration of significant funding for listing through passage of the omnibus budget reconciliation law on April 26, 1996, following severe funding constraints imposed by a number of continuing resolutions between November 1995 and April 1996. The guidance calls for prompt processing of final rules containing species facing threats of high magnitude. All four taxa in this rule face high magnitude threats.

Summary of Comments and Recommendations

In the October 1, 1993, proposed rule (58 FR 51302) and associated notifications, all interested parties were requested to submit factual reports or information that might contribute to the development of a final rule. A 90-day comment period closed on January 1, 1994. Appropriate State agencies, county governments, Federal agencies, and other interested parties were contacted and requested to comment. A letter of notification and a copy of the proposed rule were also sent to the government of Mexico. Public notices announcing the publication of the proposed rule were published in the Press-Enterprise in Riverside County on October 12, 1993, and the San Diego Union Tribune in San Diego County and the Orange County Register on October 13, 1993. No request for a public hearing was received.

A total of seven written comments were received. Two commenters supported the listing of these taxa. Two commenters neither supported nor opposed the proposed listing. Three commenters opposed the proposed listing. Information from a number of these comments has been incorporated into the final rule. Eleven relevant issues were raised in these comments and the Service's response to each is as follows:

Issue 1: One commenter stated that the estimate for remaining southern maritime chaparral was too high and suggested that the definition of southern maritime chaparral adopted by the Service, based on Holland (1986), required modification.

Service Response: A range of estimates for remaining southern maritime chaparral has been incorporated into the final rule. While the exact amount of remaining southern maritime chaparral is not agreed upon, the Service considers this plant association to be sensitive and rare. The Service has coordinated with the CDFG, knowledgeable

biologists, and other parties in determining an appropriate definition for southern maritime chaparral (Jim Dice, CDFG, T. Keeler-Wolf, D. Kelly and P. Gordon-Reedy, pers. comms., 1993).

Issue 2: One commenter argued that *Arctostaphylos glandulosa* ssp. *crassifolia* does not warrant protection under the Act because the Service has failed to demonstrate that it is a distinct taxon. The commenter claimed that there was no consensus within the scientific community regarding this taxon. The commenter stated that the Service did not clearly demonstrate that Knight's treatment (Knight 1981) should be rejected over Wells (1987, 1993). The commenter questioned the use of morphological variation in determining subspecific classification. Additionally, the commenter claimed that it is unclear whether the Scripps Ranch population of *Arctostaphylos glandulosa* is representative of this taxon.

Service Response: A discussion regarding the taxonomic history of this taxon is included under the "Discussion of the Four Taxa" section of this rule. The discussion in the proposed rule has been expanded to increase clarity and address concerns included within this comment. In determining the taxonomic status of any taxon, the Service utilizes the best available information. Nearly all taxonomic treatments published since the original description of *Arctostaphylos glandulosa* ssp. *crassifolia* in 1922 recognize this taxon as distinct. The two most recent treatments (Wells 1987, 1993) are the accepted, peer reviewed treatments for this genus. This taxon is also recognized as distinct in local floras (Beauchamp 1986) and other reports regarding the status of the taxon (SEB 1993b).

The Service does not rely on Knight (1981) because this treatment does not represent the best available information. As discussed under the "Background" section of this rule, Knight did not substantiate his claim that *Arctostaphylos glandulosa* ssp. *crassifolia* was of hybrid origin between *A. glandulosa* and other unidentified species of *Arctostaphylos*. Furthermore, Knight reversed his opinion in 1986 and accepted *A. g.* ssp. *crassifolia* as valid (T. Oberbauer, pers. comm., 1993; J. Bartel, pers. comm., 1994). Wells (1968, 1993) published in peer-reviewed publications while Knight (1981) did not. Both Wells and Knight applied morphological variation in determining the status of *A. g.* ssp. *crassifolia*. While the Service acknowledges that other methods (i.e., chemotaxonomy and genetic analysis) may be used as supplements to morphological variation as available tools for taxonomic definition, morphological variation has historically been the most widely accepted basis for taxonomic distinction for all biological organisms.

Issue 3: One commenter claimed that historic losses of *Arctostaphylos glandulosa* ssp. *crassifolia* were the result of taxonomic confusion because of "complete lack of consensus within the scientific community." The commenter noted the taxon has only recently been considered a distinct subspecies. The commenter also noted that the California Native Plant Society rejected this taxon in their 1988 Inventory (Smith and Berg 1988) and that the Service determined in the September 27, 1985, Notice of Review (50 FR 39528) that *A. g.* ssp. *crassifolia* did not represent a distinct taxon. The commenter also asserted that Federal recognition of this taxon has been lacking since the 1985 notice.

Service Response: As discussed under the "Background" section, this subspecies has been recognized as distinct for nearly 70 years. This taxon was first described as a variety of *A. glandulosa* in 1922, and has been widely recognized in taxonomic treatments since then (McMinn 1939; Abrams 1951; Munz 1959, 1974; Wells 1968, 1987, 1993;

Beauchamp 1986). In 1985, the Service rejected this taxon based on the most recent taxonomic treatment at that time. However, since that time, floristic and monographic treatments by Beauchamp (1986) and Wells (1987) recognized *A. g. ssp. crassifolia* as a distinct taxon. The latter treatment detailed the taxonomic argument for retention of the subspecies. The Service, following the criteria of the best available information, reinstated the taxon to category 2 status in 1990. The California Native Plant Society currently recognizes *A. g. ssp. crassifolia* as a list 1B taxon (Skinner and Pavlik 1994). Plants included on list 1B are considered rare and endangered in the State of California and are eligible for State listing under California's Native Plant Protection Act (chapter 10 section 1901) or the State Endangered Species Act (Skinner and Pavlik 1994).

As discussed in this rule under ``Previous Federal Action,`` the commenter is incorrect in asserting that the Service has not identified this taxon as a candidate for protection under the Act since 1985. It was published as a category 2 candidate species in the February 21, 1990, Plant Notice of Review (55 FR 6184) and as a category 1 candidate in 1993. During the period between 1985 and 1990, *Arctostaphylos glandulosa ssp. crassifolia* was widely recognized in environmental documentation (Beauchamp 1986; Nelson 1988; Pacific Southwest Biological Services 1990; Stephen Lacy,

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Biological Resource Manager, ERCE, in litt., 1991; T. Oberbauer, pers. comm., 1993). Based on the best available scientific and commercial information, the Service finds *A. g. ssp. crassifolia* to be a taxon eligible for listing under the Act.

Issue 4: Two commenters claimed that these taxa did not warrant listing as endangered or threatened because the majority of their populations are protected from development. One commenter dealt mainly with a species now being withdrawn from consideration for listing. Another commenter claimed that the report entitled ``Description, Status, Distribution, and Conservation of Del Mar Manzanita (*Arctostaphylos glandulosa ssp. crassifolia*)`` by Sweetwater Environmental Biologists (SEB 1993b), rebuts the Service's finding that listing of Del Mar manzanita is warranted. Based on this report, the commenters stated that the majority of these individuals (76 percent) occur within 7 of the 22 populations. Of these 7 major populations (each containing over 500 individuals), the commenters claimed that 82 percent will be preserved, which accounts for 70 percent of the entire taxon.

Service Response: Although these commenters evidently include *Baccharis vanessae*, *Chorizanthe orcuttiana*, and *Verbesina dissita* within the context of this comment, no specific discussion was included regarding these taxa.

The Service has considered the findings of the SEB report (1993b) in determining the status of *Arctostaphylos glandulosa ssp. crassifolia*. SEB reported that there were about 17,000 individuals of Del Mar manzanita distributed over 302 subpopulations within 24 populations in San Diego County from Oceanside south to La Jolla, and inland to Scripps Ranch in the United States. SEB described the range of this taxon as extending along the immediate coast of Baja California, Mexico, south to Cabo Colonet about 200 km (124 mi) south of the United States border.

Available data (Reid Moran, California Academy of Sciences, 1993)

Wells, T. Oberbauer, pers. comms., 1992; and herbarium collections at the San Diego Natural History Museum) indicate that the distribution of this taxon in Mexico is limited. The Service has not been presented with any evidence that *Arctostaphylos glandulosa* ssp. *crassifolia* occurs farther south than Mesa Descanseo 40 km (25 mi) south of the international border.

According to SEB (1993b), 22 of the 24 United States populations, 137 (45 percent) of the subpopulations and about 7,100 to 9,700 individuals (42 to 58 percent) of *Arctostaphylos glandulosa* ssp. *crassifolia* are still extant. SEB (1993b) further states that of the remaining individuals of this taxon, about 82 percent are proposed for conservation, which includes about 35 percent on public lands and 48 percent on private lands.

SEB (1993b) identify seven major populations that contain about three-fourths of all San Diego County *Arctostaphylos glandulosa* ssp. *crassifolia*. The Service concurs with the assessment of six of these populations and identifies the seventh population identified in SEB (1993b) as moderately large. Service staff assessed this population at fewer than 500 individuals in December 1993. The Service further considers that both the size and the configuration of these populations are important to the long-term viability of *A. g.* ssp. *crassifolia*. Currently all seven of the populations identified as large in SEB (1993b) are situated in natural blocks of vegetation greater than 40 ha (100 ac) in size.

The number of individuals in the SEB (1993b) report is not significantly different from, and generally conforms with, estimates used by the Service in preparation of the proposed rule. However, SEB (1993b) significantly overestimates the preserved population of *Arctostaphylos glandulosa* ssp. *crassifolia*. The remarks and data summary on Table 1 of the report are inconsistent--the data summary indicates that about 18 percent of this taxon is threatened by development, while the remarks section indicates that over 30 percent of the *A. g.* ssp. *crassifolia* is currently threatened by development. Although SEB (1993b) acknowledges that one of the major populations located in the city of Carlsbad, California, consists of nearly 2,000 individuals, only about 750 of these are accounted for in Table 1. The remaining 1,200 individuals are assumed to have been "graded." However, these individuals are still extant and are threatened by the implementation of a large scale development project. The Service considers the loss of most of this population, which represents a reduction of 10 to 15 percent of the United States populations of *A. g.* ssp. *crassifolia*, to be a significant impact on this taxon. Nor is public open space necessarily equivalent to protection, as indicated in the SEB report. This is exemplified by clearing and mulching of southern maritime chaparral east of Palomar Airport (Ken Cory, USFWS, pers. comm., 1996) in an area identified as a public open space in Table 1 of the SEB report.

Estimates for preservation in SEB (1993b) do not consider the configuration of remaining occupied open space or edge effects resulting from existing and proposed development. The majority of the existing *Arctostaphylos glandulosa* ssp. *crassifolia* populations are relics of larger historic populations. Nearly 50 percent of the remaining populations, comprising about 10 to 14 percent of all individuals of *A. g.* ssp. *crassifolia*, are in open space parcels that are smaller than 20 ha (50 ac). While all populations of *A. g.* ssp. *crassifolia* are important, the majority of these small, isolated, and poorly configured populations are entirely within 60 m (200 ft) of, and

are often surrounded by, development. These population configurations likely will not contribute significantly to the long-term preservation of the taxon. All are subject to edge effects (i.e., invasion of exotic plants, disturbances by local residents) and may be threatened by fuel modification activities (i.e., fire breaks, discing, reduction through thinning). The effect of isolation and habitat size reduction also retards natural fire and successional cycles within the habitat of *A. g. ssp. crassifolia* (Roberts 1993).

Of the larger and more significant populations of *Arctostaphylos glandulosa ssp. crassifolia*, only one population is protected and managed for long-term preservation (Torrey Pines State Park north). However, this population is located within a 80 ha (200 ac) parcel that is completely surrounded by development (Roberts 1993). Another population (Crest View Canyon) is under public management; however, about 50 percent of this population is located within 60 m (200 ft) of development and is subject to edge effects (Roberts 1993). While another population (upper end of Agua Hedionda) is also under public management, it is subject to incremental clearing impacts as a result of adjacent airport operations, road-widening activities, and clearing related to mulching and agriculture (Roberts 1994; K. Cory, pers. comm., 1996). This population is also bisected by numerous footpaths. At least 15 percent of this population is situated within 60 m (200 ft) of development (Roberts 1993).

Of the remaining four major populations, all are threatened in part by development and will be further fragmented or isolated when projects are completed. While the majority of one of these populations (Green Valley,

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Encinitas and Carlsbad) is proposed for conservation, three others, all located within the City of Carlsbad, will be significantly reduced as a result of proposed development. Two of these populations currently contain nearly half of all individuals (about 3,000). After mitigation is implemented for proposed development projects, these populations will be reduced by about 50 percent and will be scattered over four parcels of open space containing fewer than 20 ha (50 ac). A 20 ha (50 ac) parcel is not likely to insure long-term conservation of *Arctostaphylos glandulosa ssp. crassifolia*. Additionally, the majority of the surviving individuals will be situated within 60 m (200 ft) of development and will likely be adversely affected by edge effects (Roberts 1993, City of Carlsbad and Fieldstone/La Costa Associates 1994, OGDEN 1995a). Therefore the Service finds that the claim that 82 percent of this taxon is proposed for conservation and preservation is not supported by available data. The best available data indicate that while about 80 percent of the *A. glandulosa ssp. crassifolia* populations are within dedicated open space, parks, or preserved areas (about 30 percent of the total San Diego County populations are within the Multiple Species Conservation Program (MSCP) preserve area), only about 55 percent of the total populations are preserved when edge effects and configuration of preserved areas are considered.

Issue 5: Two commenters stated that these taxa do not warrant listing because existing regulatory mechanisms provided by the California Environmental Quality Act (CEQA), County and City of San Diego Resource Protection Ordinances (RPO's), and multispecies programs including the State Natural Communities Conservation Plan (NCCP), and local MSCP, Multiple Habitat Conservation Plan (MHCP), and the Carlsbad

Habitat Management Plan (HMP) provide adequate protection.

Service Response: Although the County and City of San Diego adopted RPO's in 1991, many of the populations of these four taxa occur outside the jurisdiction of these ordinances. For example, none of the major populations of *Arctostaphylos glandulosa* ssp. *crassifolia* are within the City of San Diego or on lands under County jurisdiction. Currently, the Service is aware of 10 development projects that have recently been approved or proposed that may eliminate nearly 50 percent of the remaining *Arctostaphylos glandulosa* ssp. *crassifolia*. This rate of decline is consistent with historical losses incurred over the last decade. As indicated by the commenter, many RPO's protect steep slopes. In addition, RPO's also apply to all biologically sensitive lands, which are defined to include those lands that support sensitive vegetation (San Diego Municipal Code Sec. 101.0462). The ordinance further states that biologically sensitive lands shall be preserved in their natural state and that any encroachment must be minimal and must not adversely impact any rare, threatened or endangered species. This presumably would include any sites containing populations of the species listed herein.

The Service acknowledges that the NCCP, MSCP, MHCP, and HMP were not adequately discussed in the proposed rule. Most of these programs were in the early development stage at the time the rule was developed. However, the Service has both monitored and actively participated in coordinating the development of these programs as they have matured. The MSCP in southern coastal San Diego County has proceeded to a significant level. As a result of these planning efforts, one taxon (*Dudleya blochmaniae* ssp. *brevifolia*) originally proposed as endangered with the four subject taxa is being withdrawn (see separate concurrent Federal Register notice), while another (*Baccharis vanessae*) is being finalized as threatened instead of endangered. The Service considers the mitigation proposed within the MSCP adequate for threats to *Baccharis vanessae* and *Arctostaphylos glandulosa* ssp. *crassifolia* within the MSCP subregion. However, both taxa have significant populations outside this planning area. While other programs may ultimately provide significant protection to the taxa considered herein, at their current planning stages, the degree of conservation afforded these taxa is uncertain and would not significantly alter the Service position. A detailed discussion regarding these programs and others has been incorporated into the final rule under Factor D ("The inadequacy of existing regulatory mechanisms"). *Verbesina dissita* does not occur in San Diego County and is not subject to the MSCP, MHCP, or the HMP planning efforts.

Issue 6: One commenter stated that while the Service asserted that State and local regulatory controls are inadequate to protect these plant taxa, the Service failed to demonstrate how Federal listing will provide further protection. The commenter noted that the Endangered Species Act provides no direct protection to listed plants on private lands. Specifically, the commenter discussed how Federal listing would not provide *Arctostaphylos glandulosa* ssp. *crassifolia*, which occurs primarily on private lands, additional protection in the two examples cited in the proposed rule.

Service Response: The Service is required to determine whether any species qualifies for listing as endangered or threatened based on a review of the five factors listed under Section 4 of the Act. The Service acknowledges that the level of protection provided for listed plant species is not equivalent to the protection accorded federally listed animal species. Impacts to listed plant species are addressed

through consultation with other Federal agencies when a Federal action is involved. While Federal actions may be limited on private lands, some protection may be afforded through this process. For example, in autumn of 1993, the United States Army Corps of Engineers (Corps) initiated conferencing regarding the proposed impacts of a large-scale development project on a significant population of *Arctostaphylos glandulosa* ssp. *crassifolia*. The conferencing process resulted in improved preservation of that taxon.

When assessing a habitat conservation plan under section 10(a)(1)(B) of the Act, the Service must conduct an internal consultation pursuant to section 7 of the Act to determine whether approval of the plan will jeopardize any federally proposed or listed plant or animal species. Additionally, "take" of federally listed plant species is prohibited under Federal law in circumstances where a State law is violated, such as a violation of the provisions of CEQA or the California Endangered Species Act.

Federal listing also provides a significant degree of recognition by State and local agencies and private landowners which may result in increased protection. Survey requirements and conservation guidelines for listed and non-listed species differ considerably under the State Coastal Protection Act, CEQA, RPO's and other local conservation regulations. Frequently, unlisted rare species are inadequately surveyed or given inadequate protection under these processes.

Issue 7: One commenter claimed that listing these taxa would have a negative effect on current multispecies planning efforts.

Service Response: The Service is required to determine whether any species is endangered or threatened based on the applicability of the five

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factors listed under Section 4(a)(1) of the Act. While the Service supports the intent of multispecies planning efforts to avoid or reduce the need for future listing actions within designated planning areas, significant populations of the four taxa discussed herein are outside approved or nearly completed multispecies conservation plan areas (MSCP), or not adequately protected within approved plans (i.e., *Verbesina dissita* within the Central Coastal subregion of Orange County). Two of the four taxa are considered covered species under the MSCP (*Arctostaphylos glandulosa* ssp. *crassifolia* and *Baccharis vanessae*). Future impacts to these taxa within the MSCP have been considered and are addressed through planned preservation or management for plan participants throughout the subregion (see Available Conservation Measures). Thus listing these three taxa will not have a negative effect on current planning efforts. *Chorizanthe orcuttiana* is extremely rare and not considered adequately conserved by the MSCP. Federal and State listing actions frequently drive multispecies planning efforts and offer guidance to these conservation efforts, many of which are voluntary. Well-designed multispecies conservation plans must consider a wide range of sensitive species and their habitats. The necessity for additional listings indicate that these goals have not yet been met as indicated in the discussion under Factor D.

Issue 8: One commenter thought that the Service should designate critical habitat for all four taxa included in this rule, stating that critical habitat designation would support the mapping efforts and recommendations of the City of San Diego's MSCP, and that critical habitat should include all remaining southern maritime chaparral.

Commenters noted that the locations of most of these taxa are available to the public through environmental impact reports, rebutting the Service's argument that the designation of critical habitat was not prudent since this would increase the likelihood of vandalism (i.e., habitat destruction) by revealing precise locations.

Service Response: The Service acknowledges that available public environmental documentation has already disclosed the location of many populations of the four taxa. The Service finds that designation of critical habitat is not prudent because it would not be beneficial to any of these four taxa. Critical habitat is only applicable to actions that have a Federal nexus. Any Federal action that may affect a listed species or designated critical habitat is addressed through section 7 of the Act, which requires a Federal agency to consult with the Service to determine if the action is likely to jeopardize a species or result in destruction or adverse modification of critical habitat. Of the four taxa, only *Chorizanthe orcuttiana* (historically) and *Baccharis vanessae* occur on Federal lands, and none are associated with wetlands which receive protection under section 404 of the Clean Water Act. It is anticipated that few of the remaining populations will be affected by actions of Federal agencies.

Issue 9: The Service should consider economic effects in determining whether to list these taxa under the Endangered Species Act.

Service Response: In accordance with section 4(b)(1)(A) of the Act, and 50 CFR 424.11(b) of the implementation regulations, listing decisions are made solely on the basis of the best available scientific and commercial information, without reference to possible economic or other impacts of such a determination.

Issue 10: One commenter stated that collection is not a threat to any of the four taxa.

Service Response: As discussed under Factor B ('`Overutilization for commercial, recreational, scientific or educational purposes''), *Chorizanthe orcuttiana* is threatened by overcollection because of limited population size, horticultural appeal, and the relative ease of access to remaining sites.

Issue 11: Two commenters requested that a qualified party perform scientific peer review to reconcile the status of *Del Mar manzanita* as a distinct subspecies, and one suggested that the Service reopen the comment period to facilitate this review.

Service Response: As discussed in the Background section, disagreements over the taxonomic status of this species between Wells, the primary expert on the species, and Knight, who once proposed that the subspecies was not distinct, have been resolved in peer-reviewed publications.

Summary of Factors Affecting the Species

Section 4 of the Endangered Species Act and regulations (50 CFR part 424) promulgated to implement the listing provisions of the Act set forth the procedures for adding species to the Federal lists. A species may be determined to be an endangered or threatened species due to one or more of the five factors described in section 4(a)(1). The threats facing these four taxa are summarized in Table 1.

Table 1.--Summary of Threats

Develop.	Limited	Trampling	Alien plants
Fire control	activity	numbers	
Arctostaphylos glandulosa ssp. crassifolia		X	X
X	X		
Baccharis vanessae		X	X
X	X	X	
Chorizanthe orcuttiana		X	X
	X	X	
Verbesina dissita			
X	X		

These factors and their application to *Arctostaphylos glandulosa* Eastw. ssp. *crassifolia* (Jeps.) Wells (Del Mar manzanita), *Baccharis vanessae* Beauchamp (Encinitas baccharis), *Chorizanthe orcuttiana* Parry (Orcutt's spineflower), and *Verbesina dissita* Gray (big-leaved crown-beard) are as follows:

A. The present or threatened destruction, modification, or curtailment of its habitat or range. One of the four taxa herein (*Chorizanthe orcuttiana*) is restricted to the south-central coast of San Diego County, California. *Baccharis vanessae* extends inland 32 km (20 mi) and north to the Santa Margarita Mountains of northern San Diego County. *Arctostaphylos glandulosa* ssp. *crassifolia* extends from the south-central coast of San Diego County south into northwestern Baja California, Mexico. *Verbesina dissita* occurs in two disjunct populations, one in coastal southern Orange County and one along the coast in northwestern Baja California, Mexico. The most imminent threat facing all four taxa and their associated habitats is the ongoing and threatened destruction and modification of habitat by one or more of the following--urban development, agricultural development, recreational

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activities, trampling, and fuel modification activities.

Arctostaphylos glandulosa ssp. *crassifolia* (Del Mar manzanita) is restricted to sandstone-derived soils along the south-central coast of San Diego County, extending south to Mesa el Descanseo 40 km (25 mi) south of the United States border, Baja California, Mexico. This taxon is restricted almost exclusively to southern maritime chaparral and is considered to be an indicator species for this plant community. Estimates indicate that between 82 and 93 percent of southern maritime chaparral vegetation in San Diego County has been lost as a result of urban and agricultural development (Oberbauer and Vanderwier 1991; OGDEN 1993; D. Hogan, in litt., 1993). Between 1980 and 1990, the population of San Diego County increased by more than 600,000 people. Most of this increase occurred on or near the coast at sites historically occupied, in part, by southern maritime chaparral. About 140 to 180 ha (300 to 450 ac) (12 to 30 percent) of southern maritime chaparral is currently located within approved or proposed developments in San Diego County (RECON 1987, Roberts 1992, SEB 1993a; D. Hogan, in litt., 1993; Gail Kobetich, USFWS, in litt., 1993). Less than 30

percent of the remaining southern maritime chaparral is preserved in parks (e.g., Torrey Pines State Park) with long-term management for conservation.

While 25 of 26 populations of *Arctostaphylos glandulosa* ssp. *crassifolia* are still extant in part, the majority of these populations have been greatly reduced and significantly fragmented by urban and agricultural development, most of which has occurred since 1982. About a 50 percent decline in the number of stands and the number of individuals has occurred since 1982 (Roberts 1993, SEB 1993b). Of the remaining individuals, the majority are distributed in highly fragmented habitat along the margins of residential development.

Over 75 percent of *Arctostaphylos glandulosa* ssp. *crassifolia* in the United States occurs within 6 concentrations located in Carlsbad, Encinitas, Del Mar, and Torrey Pines State Park. Four of the six populations, located in Carlsbad and Encinitas, are threatened in part by approved or proposed development projects. These projects will result in the elimination of over 1,900 individuals (over 35 percent) of *A. g.* ssp. *crassifolia* that occurs within these 6 populations through direct impacts. Furthermore the additional loss of 1,000 individuals (20 percent) will likely result from indirect impacts such as fuel modification and edge effects (Roberts 1993, SEB 1993a). Several of the smaller populations of *A. g.* ssp. *crassifolia* in Encinitas, Carlsbad, Carmel Valley and on Carmel Mountain are also threatened by development and associated indirect impacts (Roberts 1992, SEB 1993b).

The status of *Arctostaphylos glandulosa* ssp. *crassifolia* and its habitat in extreme northwestern Baja California, Mexico, are not well documented. However, this species only extends some 40 km (25 mi) south of the United States border. This region represents one of the most severely impacted areas in Baja California. Many of the same factors (urban and agricultural development) that have affected the status of this taxon in the United States are also clearly having an impact south of the border (Oberbauer 1992).

Chorizanthe orcuttiana (Orcutt's spineflower) is restricted to exposed sandy soils at two sites in coastal south-central San Diego County. One site, located at Torrey Pines State Park, is protected. However, this population has not been seen since 1987 (T. Oberbauer, pers. comm., 1992). The only currently known population is within Oak Crest Park in Encinitas, and this population is threatened by proposed recreational facilities (see Factor D). The reduction of the southern maritime chaparral in the park will have a significant impact on the long-term viability of the only existing *C. orcuttiana* population. Estimates indicate that between 82 and 93 percent of southern maritime chaparral vegetation in San Diego County has been lost as a result of urban and agricultural development (Oberbauer and Vanderwier 1991; OGDEN 1993; D. Hogan, in litt., 1993).

Baccharis vanessae (Encinitas baccharis) is associated with dense mixed chaparral and southern maritime chaparral. Fourteen populations (and one isolated individual) currently exist. Seven of these remaining populations are threatened by development projects. Five populations are in the Del Dios Highlands within the Rancho Cielo project area. Three of these are threatened by urban development and a golf course (CDFG 1992). Clearing vegetation in 1991 and 1992 and application of herbicides in 1993, in combination with a serious fire in 1990, may already have eliminated some of these plants. Two other populations near Lake Hodges have been identified as threatened by proposed developments (CDFG 1992) or inundation from a proposed water storage

facility (OGDEN 1995b).

In the United States, *Verbesina dissita* (big-leaved crown-beard) is restricted to rugged coastal hillsides and canyons in southern maritime chaparral and, to a lesser extent, coastal sage scrub and mixed chaparral, along a 3.2 km (2 mi) stretch of coastline in Laguna Beach, Orange County. Although some populations extend into Aliso-Woods Regional Park, the majority of the remaining populations are on private land and these populations are threatened by residential development and fuel modification activities (CDFG 1992).

Residential development and fuel modification activities continue to incrementally impact the main Laguna Beach population of *Verbesina dissita* (CDFG 1992). At least four residences were built directly on *V. dissita* plants after its State-listing as a threatened species in 1989. Although the individual houses eliminated a relatively small number of plants, local ordinances require the creation of a fuel modification zone up to 46 m (150 ft) from the residence (Richard Drewberry, Laguna Beach Fire Department, pers. comm., 1991). Over 20 percent of *V. dissita* occurrences are within 46 m (150 ft) of residential development. If these ordinances are fully implemented, a significant portion of this species in the United States would be eliminated. In 1984, a fuel break was cut through one population on Temple Hill. The species normally persists in relatively dense brush, although it is known to respond favorably to some clearing and fires. The plants in the fuel break began to decline after four years (Fred Roberts, USFWS, pers. obs., 1992). In 1991, the City of Laguna Beach used goats to clear fuel breaks despite objections that the goats could potentially consume rare plant species (Dr. Peter Bowler, University of California, Irvine, pers. comm., 1992). The City of Laguna Beach has indicated that many areas containing dense brush adjacent to residential development will be cleared (R. Drewberry, pers. comm., 1991). These areas are occupied in part by *V. dissita*. One development completed in 1989 has placed irrigation and hydromulching over one population. *Verbesina dissita* is not expected to persist with overwatering and competition from *Atriplex semibaccata* (Australian saltbush), which is frequently used in landscaping along the borders of development (F. Roberts, pers. obs., 1992).

The remaining habitat of *Verbesina dissita* in the United States is relatively contiguous. However, several developments have been proposed that will reduce and further fragment this rare vegetation association. Only 20 percent of the habitat is preserved (i.e., in Aliso-Woods Canyon Regional Park).

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The majority of *Verbesina dissita* populations occur south of the United States-Mexican border in coastal, northwestern Baja California, where it occurs in vegetation associations similar to those found in Laguna Beach, California. The status of *V. dissita* and its habitat in Mexico are not well documented. According to one prominent researcher, the distribution of *V. dissita* in Mexico is spotty (R. Moran, pers. comm., 1992). Over 20 populations are known between Punta Descanseo and San Telmo near Cabo Colonet (Roberts 1988). A survey of historic localities in 1988 between Punta el Descanseo and Punta Santo Tomas determined that over 25 percent of these localities had been urbanized or converted to agriculture. Four separate localities are known from Punta Bunda just south of Ensenada. However, three of these are threatened by changes in land use from relatively pristine conditions

in 1987 to extensive clearing in addition to rural condominium development in 1990 (F. Roberts, memo to file, 1992). Many of the same factors threatening the species in the United States (i.e., urban and agricultural development) are threatening this species in Mexico as well (Oberbauer 1992).

B. Overutilization for commercial, recreational, scientific, or educational purposes. Some taxa have become vulnerable to collecting by curiosity seekers as a result of increased publicity following the publication of listing proposals. *Chorizanthe orcuttiana* is highly restricted and is vulnerable to over-collection because of its rarity. Some professional and amateur botanists are known to favor collection of rare species, either to have examples in their collection or because these specimens are valuable to trade with other institutions.

C. Disease or predation. Disease is not known to be a factor for any of the taxa. Although swollen galls on the stems of *Baccharis vanessae* indicate parasitism by a moth or butterfly (Beauchamp 1980), insect predation of the four taxa is not well understood.

D. The inadequacy of existing regulatory mechanisms. Existing regulatory mechanisms that may provide some protection for *Arctostaphylos glandulosa* ssp. *crassifolia*, *Baccharis vanessae*, *Chorizanthe orcuttiana*, and *Verbesina dissita* include--(1) the California Endangered Species Act (CESA); (2) the California Environmental Quality Act (CEQA); (3) the California Natural Community Conservation Planning Program (NCCP), which includes the San Diego Multiple Species Conservation Plan (MSCP), Multiple Habitat Conservation Plan (MHCP), and Carlsbad Habitat Management plan (HMP); (4) the Federal Endangered Species Act in those cases where these taxa occur in habitat occupied by other listed species; (5) conservation provisions under the Federal Clean Water Act; (6) land acquisition and management by Federal, State, or local agencies, or by private groups and organizations; and (7) local laws and regulations.

State Laws and Regulation:

Pursuant to the Native Plant Protection Act (chapter 10 section 1900 et seq. of the California Fish and Game Code) and California Endangered Species Act (chapter 1.5 section 2050 et seq. of the Fish and Game Code), the California Fish and Game Commission listed *Baccharis vanessae* as endangered in 1987 and *Chorizanthe orcuttiana* in 1979. *Verbesina dissita* was listed as threatened by the State of California in 1989. Although both statutes prohibit the "take" of State-listed plants (chapter 10 section 1908 and chapter 1.5 section 2080), some projects do not comply with State law. As an example, in 1992, *V. dissita* plants in Laguna Beach were removed without the State's knowledge (Ken Berg, CDFG, pers. comm., 1992).

Local lead agencies empowered to uphold and enforce the regulations of the CEQA have made determinations that have or will adversely affect these taxa and their southern maritime chaparral habitat. The CEQA requires that a project proponent publicly disclose the potential environmental impacts of proposed projects. The public agency with primary authority or jurisdiction over the project is designated as the lead agency, and is responsible for conducting a review of the project and consulting with other agencies concerned with resources affected by the project. Required biological surveys are often inadequate and project proponents may disregard the results of surveys if occurrences of sensitive species are viewed as a constraint on project design. Mitigation measures used to condition project approvals are often

experimental and fail to adequately guarantee protection of sustainable populations of the taxa considered herein. CEQA decisions are also subject to overriding social and economic considerations.

To illustrate, the environmental documentation for a large-scale development project in Carlsbad did not include sufficient surveys for *Chorizanthe orcuttiana* or *Baccharis vanessae* (Pacific Southwest Biological Services 1990; Larry Sward, SEB, in litt., 1993), although the only currently known population of *C. orcuttiana* occurs in Encinitas, less than 3.2 km (2 mi) distant, and one of the largest populations of *B. vanessae* occurs on an adjacent parcel. One of the largest populations of *Arctostaphylos glandulosa* ssp. *crassifolia* also occurs within this project site. Although impacts to this taxon were identified as significant under the CEQA, the adopted mitigation measures were considered to be insufficient (S. Lacy, in litt., 1991). In another project within the City of Carlsbad, the elimination of a population of *A. g.* ssp. *crassifolia* was not considered to be a significant impact, even though the taxon was a Federal category 2 candidate for listing at the time (M.F. Pongeggi and Associates 1993). Impacts to category 2 candidates were considered significant under the CEQA prior to 1996 revisions in candidate policy that eliminated category 2 ranking (61 FR 7596; February 28, 1996).

Moreover, transplantation is frequently used to mitigate for the loss of rare plant species; however, it has yet to be demonstrated to provide for long-term viability of any of the four taxa. Several attempts at transplanting *Baccharis vanessae* and *Arctostaphylos glandulosa* ssp. *crassifolia* have been reported by Hall (1987). Attempts to transplant *B. vanessae* at Quail Botanical Garden and at San Dieguito County Park failed shortly after the monitoring period ended. Six years after individuals of *A. g.* ssp. *crassifolia* were transplanted at Quail Botanical Garden, 75 percent of the plants had died.

Regional Planning Efforts

In 1991, the State of California established the NCCP program to address conservation needs throughout the State. The focus of current planning programs is the coastal sage scrub community in southern California, although other vegetation communities are being addressed in an ecosystem-level approach. Southern maritime chaparral and the four taxa are currently being considered under the MSCP, MHCP, and the Orange County Central Coastal NCCP programs. The MHCP, which will include the Carlsbad HMP program, is still in the early developmental phase and thus it is uncertain to what degree it will be successful in providing protection for these taxa.

The NCCP for the Central and Coastal Subregion of Orange County was approved in July of 1996. Only one of the four taxa (*Verbesina dissita*) occurs within the Central/Coastal NCCP. While the entire population of this species in

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the United States is within this subregion, only about 10 percent of the species' distribution is protected by the Central/Coastal Plan. The species is not adequately conserved, nor is it considered a "covered species" under the plan. Covered species are those species that have been adequately considered in terms of long-term preservation within a Habitat Conservation Planning Area or NCCP subregion. Under an agreement with the participants, CDFG, and the Service, future potential impacts for covered species are considered adequately addressed through proposed preservation, mitigation, and management.

Since the publication of the proposed rule, the MSCP, a regional planning effort in southwestern San Diego County, has been finalized and submitted to the Service as part of an application for a section 10(a)(1)(B) incidental take permit for 85 species, including *Arctostaphylos glandulosa* ssp. *crassifolia* and *Baccharis vanessae*. The Service and the City of San Diego have jointly prepared a Recirculated Environmental Impact Report/Environmental Impact Statement, Issuance of Take Authorizations for Threatened and Endangered Species due to Urban Growth within the Multiple Species Conservation Program (MSCP) Planning Area. This document, released on August 30, 1996, for a 45-day public review period, assesses the effects of land-use decisions that will be made by local jurisdictions to implement the plan and the effects of the proposed issuance of the incidental take permit on the 85 species. A decision on the permit issuance is expected in late 1996.

The MSCP will, upon approval, set aside preservation areas and provide monitoring and management for the 85 "covered species" addressed in the permit application, including *Arctostaphylos glandulosa* ssp. *crassifolia* and *Baccharis vanessae*. "Covered species" are taxa that will be adequately conserved by the plan's proposed preservation and management. About 30 percent of the *A. g. ssp. crassifolia* population (without consideration to edge effect) is protected within the MSCP (about 90 percent of the species' total populations are within the subregion) and about 45 percent of *B. vanessae* populations are protected within the MSCP (about 70 percent of the total populations are within the subregion). While all threats have not been eliminated for these two taxa within the subregion, the Service believes that future potential impacts will be adequately addressed by management incorporated into the final MSCP agreement. Project proponents in areas outside the MSCP subregion will be required to coordinate with the Service on these taxa where applicable.

Federal Laws and Regulations

The Endangered Species Act may already afford protection to candidate or other sensitive species if they co-exist with species already listed as threatened or endangered under the Act. Although the coastal California gnatcatcher (*Polioptila californica californica*) is listed as threatened under the Act and overlaps with the range of the taxa considered herein, the coastal California gnatcatcher primarily utilizes a different habitat (coastal sage scrub). Additionally, under provisions of section 10(a) of the Act, the Service may permit the incidental "take" of the gnatcatcher during the course of an otherwise legal activity provided that the taking will not appreciably reduce the likelihood of its survival and recovery in the wild. Projects developed with authorization for take of the coastal California gnatcatcher may, however, contribute to the decline of *Arctostaphylos glandulosa* ssp. *crassifolia*, *Baccharis vanessae* and *Chorizanthe orcuttiana* in areas where the project area includes both coastal sage scrub and southern maritime chaparral.

Some protection has been afforded to these taxa through section 404 of the Clean Water Act (G. Kobetich, in litt., 1993). However, since the majority of these taxa occur in upland habitat or in isolated and fragmented parcels, it is unlikely that actions affecting the taxa will require section 404 permits.

Land Acquisition and Management

Land acquisition and management by State or local agencies or by private groups and organizations have contributed to the protection of some localities containing the taxa included in this rule. However, as discussed below, these efforts are inadequate to assure the long-term

survival of these four taxa. For example, Torrey Pines State Park and Crest Canyon Preserve (Del Mar) contain significant populations of *Arctostaphylos glandulosa* ssp. *crassifolia*. While Torrey Pines State Park is managed for long-term preservation of biological resources, the populations within the park contain less than 20 percent of the remaining *A. g.* ssp. *crassifolia* individuals. The populations of this taxon in Crest Canyon Preserve Park are affected by trampling associated with recreational activities and edge effects (see Factor E). A small population of *A. g.* ssp. *crassifolia* located within San Dieguito County Park is also threatened by edge effects and trampling from recreational activities.

Three of the species considered within this rule (*Arctostaphylos glandulosa* ssp. *crassifolia*, *Baccharis vanessae*, and *Chorizanthe orcuttiana*) occur within Oak Crest Park in Encinitas. While this park is under public ownership and management, these plants are threatened by the construction of recreational facilities, invasive exotics, and trampling (see Factors A and E).

A single population of *Baccharis vanessae* is known from the Cleveland National Forest in the Santa Margarita Mountains (S. Boyd, Rancho Santa Ana Botanical Garden, in litt., 1992). While this population is protected in part because it is isolated, it represents less than 10 percent of the known populations of this species. In Orange County, *Verbesina dissita* extends into Aliso-Woods Canyons Regional Park. However, this park encompasses less than 10 percent of the known populations of the species. Additionally, while this county regional park is, in part, managed for biological conservation, *V. dissita* is threatened by fuel modification (i.e., thinning, mechanical clearing, and irrigation) and exotic vegetation replacement at the park boundary.

These plant taxa also occur in "dedicated" open space frequently in association with development projects. These areas are often specifically set aside for conservation as required by local and county project approvals and/or the CEQA, and are managed by private organizations, individuals, corporations, or local jurisdictions. However, open space dedications do not incorporate the principles of conservation biology. Many are inadequately configured, or are too small for the long-term preservation of these taxa (see Factor E). County open space designations within General Development Plans are subject to amendments and, therefore, cannot be considered as permanent conservation.

Local Laws, Regulations, and Ordinances

The four taxa in this rule have been identified as sensitive under various local laws, regulations and ordinances. However, development projects continue to be approved and implemented with designs that do not preserve populations or habitat for the taxa considered herein. Currently, the Service is aware of 10 approved or proposed development projects that will directly or indirectly impact about 3,000

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individuals of *Arctostaphylos glandulosa* ssp. *crassifolia*. While these projects have been or currently are subject to review under existing local regulatory mechanisms and conservation plans, this taxon is still declining rapidly. Management and recovery become increasingly difficult as options for preservation are reduced.

Existing local land-use regulations have failed to protect these taxa as exemplified by Oak Crest Park in Encinitas. Although a portion

of the park was originally set aside for conservation purposes by the County of San Diego (D. Hogan, in litt., 1991; T. Oberbauer, pers. comm., 1992), recreational development has eliminated southern maritime chaparral habitat and individuals of *Arctostaphylos glandulosa* ssp. *crassifolia*, *Baccharis vanessae*, and *Chorizanthe orcuttiana*. One area recently developed included a natural preserve area set aside under an agreement between the City and the California Coastal Commission. Current recreational development plans for Oak Crest Park, including the construction of a community center, swimming pool and numerous walking paths, will impact two of these taxa (*A. g. ssp. crassifolia* and *B. vanessae*). The proposed development will reduce the *B. vanessae* population and the extent of southern maritime chaparral within the park by approximately one-third (David Wigginton, City of Encinitas Community Services, pers. comm., 1992).

Another example demonstrating how existing regulatory mechanisms are inadequate is provided by a project in the City of Carlsbad that was originally approved circa 1980. The project area contained the northernmost known population of *Arctostaphylos glandulosa* ssp. *crassifolia* and a significant stand of southern maritime chaparral. When a city official was approached by the project proponent in 1992, the city informed the proponent that the existing CEQA documentation was inadequate and that additional biological surveys would be required. Despite this finding, the proponent was able to obtain grading permits to clear the land without additional documentation (Terri Stewart, CDFG, pers. comm., 1992).

Several development projects have proceeded without adequate surveys for *Chorizanthe orcuttiana* (City of Carlsbad and Fieldstone/La Costa Associates 1994). *Arctostaphylos glandulosa* ssp. *crassifolia* has been considered in the majority of these plans; however projects have recently been proposed and approved that have or will directly or indirectly eliminate nearly half of the population within these planning areas (SEB 1993a, 1993b). Because *A. g. ssp. crassifolia* has already declined by about 50 percent over the last decade, these additional significant losses will contribute to the further decline of this taxon and may affect its recovery (Roberts 1993; SEB 1993b; G. Kobetich, in litt., 1993). Although the only extant population of *C. orcuttiana* is on public land within the jurisdiction of the MHCP, no protection measures have been developed or implemented for this population. Several important populations of *Baccharis vanessae* are threatened by current project proposals that will reduce the effectiveness of the MHCP, when developed, to adequately stabilize populations within the subregion (OGDEN 1995a; D. Hogan, in litt., 1991; D. Wigginton, pers. comm., 1992). The additional recognition that results from listing is expected to generate additional efforts in providing for the long-term preservation of these four taxa.

Laws and Regulation in Mexico

The range of *Arctostaphylos glandulosa* ssp. *crassifolia* and *Verbesina dissita* continues south along the Pacific coast into northwestern Baja California, Mexico. Mexico has laws that presumably provide protection to rare plants; however, enforcement of these laws is lacking (USFWS 1992b).

In summary, although most of these taxa are receiving at least some protection through existing regulatory mechanisms, threats continue to adversely affect the taxa, as indicated by their declining status.

E. Other natural or manmade factors affecting their continued existence. At least two of the taxa (*Baccharis vanessae* and *Chorizanthe orcuttiana*) may be threatened by a risk of extinction from naturally

occurring events because of their restricted distribution and small population size. Genetic viability can be reduced in small populations, making them less adaptable to changes in the environment. The potential for extirpation by virtue of their small population sizes can be exacerbated by natural causes such as drought or fire. For example, the impact of fire on *Baccharis vanessae* is not fully understood, yet a 1,200 ha (3,000 ac) fire in the Del Dios highlands burned four of the known populations in September 1990 (CDFG 1992, Los Angeles Times 1992). Many populations are now in close proximity to residential development, and are threatened by edge effects including fuel modification activities, fire suppression, the invasion of exotic plant species, and increased human activities associated with nearby urbanization. Additionally, unidentified pollinators or seed-dispersal agents for these taxa may also be impacted by development.

Habitat fragmentation and isolation, in addition to fuel modification, threaten the taxa in areas adjacent to residential development. For example, nearly 15 percent of extant *Arctostaphylos glandulosa* ssp. *crassifolia* occurs in small, fragmented, and isolated parcels of open space (Roberts 1993). Of the six largest populations of this taxon, 20 percent of the individuals are within 60 m (200 ft) of existing development and are threatened by edge effects (Roberts 1993, SEB 1993a). This is exemplified by Crest Canyon Preserve, where nearly 50 percent of the approximately 1,000 individuals of *A. g.* ssp. *crassifolia* are within 60 m (200 ft) of development. *Arctostaphylos glandulosa* ssp. *crassifolia* is also threatened by trampling where trails have been cut through populations by recreationalists and farm workers (Hogan 1990; CDFG 1992; F. Roberts and E. Berryman, USFWS, pers. obs.).

Conflicts between fire management and preservation arise when insufficient buffers exist between sensitive biological resources and residential dwellings. A recent example includes clearing of about 1 ha (2 ac) of southern maritime chaparral adjacent to a new residential development in Carlsbad in June 1992.

Baccharis vanessae is limited to small numbers, comprising only 14 extant populations containing about 2,000 individuals. No population is known to have over 300 individuals and 5 of these populations have fewer than 6 individuals. One individual has been discovered on the western slopes of Carmel Mountain.

Chorizanthe orcuttiana, known from a single locality, is the most vulnerable of the four taxa. This species is threatened by trampling by farm workers and recreationalists because of its small size and its preference for open areas, which tend to attract foot traffic through otherwise dense chaparral vegetation (F. Roberts and E. Berryman, pers. obs.). The only known site could be eliminated in a single event if a particularly large number of people were to walk through and trample the population. Exotic grass and weed species are also threatening the population.

All four taxa are potentially threatened by the interruption of the natural fire cycle. Fragmentation has rendered individual populations more susceptible to fire events that may either

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occur too frequently or be suppressed too long to maintain a healthy southern maritime chaparral habitat.

The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and

future threats faced by these four taxa in determining to make this rule final. Based on this evaluation, the preferred action is to list *Arctostaphylos glandulosa* ssp. *crassifolia* and *Chorizanthe orcuttiana* as endangered. These taxa are in danger of extinction throughout all or a significant portion of their ranges due to habitat alteration and destruction resulting from urban, recreational and agricultural development; fuel modification activities; trampling by farm workers and recreational activities; inadequacy of existing regulatory mechanisms; naturally occurring events due to limited populations; and competition from exotic plant species. For the reasons discussed below, the Service finds that *Verbesina dissita* and *Baccharis vanessae* are likely to become endangered within the foreseeable future throughout all or a significant portion of their range. Although *V. dissita* is extremely threatened in the United States by development and fuel modification activities, the status of this species in Baja California, Mexico, is considerably better due to a larger number of extant populations. However, it is still threatened by similar activities in Mexico. Therefore the preferred action is to list *V. dissita* as threatened. While nearly half of the known *B. vanessae* populations continue to be at risk from urban development, inundation from a proposed water storage facility, and fire management methods, the species is not in immediate danger of extinction. The Service therefore revises the preferred action for *B. vanessae* from listing as endangered in the original proposed regulation to listing as threatened in this final rule. In addition, the MSCP in San Diego County will offer significant management and preservation for about half of the populations upon its authorization. Critical habitat is not being proposed for these taxa for the reasons discussed below.

Critical Habitat

Critical habitat, is defined in section 3 of the Act, as: (i) The specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. "Conservation" means the use of all methods and procedures needed to bring the species to the point at which listing under the Act is no longer necessary.

Section 4(a)(3) of the Act, as amended, and implementing regulations (50 CFR 424.12) require that, to the maximum extent prudent and determinable, the Secretary designate critical habitat at the time the species is determined to be endangered or threatened. The Service finds that designation of critical habitat is not prudent for the taxa discussed in this rule at this time. Service regulations (50 CFR 424.12(a)(1)) state that designation of critical habitat is not prudent when one or both of the following situations exist--(1) the species is threatened by taking or other human activity, and identification of critical habitat can be expected to increase the degree of such threat to the species; or (2) such designation of critical habitat would not be beneficial to the species.

As discussed under Factor B, *Chorizanthe orcuttiana* is particularly threatened by taking, specifically overcollecting, an activity difficult to regulate and enforce. Taking is only regulated by the Act

with respect to plants in cases of (1) removal and reduction to possession of federally listed plants from lands under Federal jurisdiction, or their malicious damage or destruction on such lands; and (2) removal, cutting, digging-up, or damaging or destroying in knowing violation of any State law or regulation, including State criminal trespass law. The publication of precise maps and descriptions of critical habitat in the Federal Register would make these plants more vulnerable to incidents of collection or vandalism and, therefore, could contribute to the decline of this species.

Critical habitat designation provides protection only on Federal lands or on private lands when there is Federal involvement through authorization or funding of, or participation in, a project or activity. Of the taxa discussed herein, only one population of *Baccharis vanessae* is known to occur on Federal lands. All Federal and state agencies and local planning agencies involved have been notified of the location and importance of protecting the habitat of these taxa. Protection of their habitat will be addressed through the recovery process and through the section 7 consultation process. Section 7(a)(2) of the Act requires Federal agencies, in consultation with the Service, to ensure that any action authorized, funded, or carried out by such agency, does not jeopardize the continued existence of a federally listed species, or does not destroy or adversely modify designated critical habitat. The taxa in this rule are all confined to small geographic areas and each population is composed of so few individuals that the determinations for jeopardy and adverse modification would be similar. Therefore, designation of critical habitat provides no additional benefit beyond those that these taxa would receive by virtue of their listing as endangered or threatened species and likely would increase the degree of threat from vandalism, collecting, or other human activities. The Service finds that designation of critical habitat is not prudent for these taxa at this time.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Endangered Species Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain activities. Recognition through listing encourages and results in conservation actions by Federal, State, and local agencies, private organizations, and individuals. The Act provides for possible land acquisition from willing sellers and cooperation with the States and requires that recovery actions be carried out for all listed species. The protection required of Federal agencies and the prohibitions against certain activities involving listed plants are discussed, in part, below.

Section 7(a) of the Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat, if any is being designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(4) requires Federal agencies to confer with the Service on any action that is likely to jeopardize the continued existence of a species proposed for listing or result in destruction or adverse modification of proposed critical habitat. If a species is listed subsequently, section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of the species or destroy

or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into formal consultation with the Service.

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Although only one of the four taxa (*Baccharis vanessae* at the Olivenhein Water Storage Facility) is known to be directly affected by activities permitted under section 404 of the Clean Water Act, effects of actions that include direct and indirect impacts that are interrelated or interdependent with the taxa under consideration may require a permit under section 404 of the Clean Water Act. Additionally, two of the taxa (*Arctostaphylos glandulosa* ssp. *crassifolia* and *B. vanessae*) are known to occur in areas where highway projects, which may involve Federal funding and the Federal Highways Administration, have been proposed. At least one taxon (*B. vanessae*) occurs on Federal land, within the Cleveland National Forest and within 1 km (0.6 mi) of Camp Pendelton Marine Base. New populations of these taxa could be discovered at Miramar Naval Air Station, Point Loma Naval Reserve, and Camp Pendelton Marine Base. These Federal nexuses would require initiation of section 7 consultation on actions that may affect the taxa.

Two of these species, *Arctostaphylos glandulosa* ssp. *crassifolia* and *Baccharis vanessae*, are considered covered species under the MSCP. These species will receive benefits from the plan upon its approval. These benefits include--(1) preservation of the majority of populations within the subregion including two major populations of *A. g.* ssp. *crassifolia* and one and a half major populations of *B. vanessae*, (2) management plans that will address impacts from fuel management and close proximity of existing and proposed development, and (3) monitoring of the status of these populations. Some populations within this subregion will be eliminated or reduced, but it has been determined that the populations preserved under the plan will be adequate to stabilize the status of these taxa within the MSCP planning area.

The Act and its implementing regulations set forth a series of general prohibitions and exceptions that apply to all endangered or threatened plants. All prohibitions of section 9(a)(2) of the Act, implemented by 50 CFR 17.61 (endangered plants) or 17.71 (threatened plants), apply. These prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to import or export, transport in interstate or foreign commerce in the course of a commercial activity, sell or offer for sale in interstate or foreign commerce, or remove and reduce the species to possession from areas under Federal jurisdiction. In addition, for plants listed as endangered, the Act prohibits the malicious damage or destruction on any area under Federal jurisdiction and the removal, cutting, digging up, or damaging or destroying of such endangered plants in knowing violation of any State law or regulation, including State criminal trespass law. Section 4(d) of the Act allows for the provision of such protection to threatened species through regulation. This protection may apply to *Baccharis vanessae* and *Verbesina dissita* in the future if regulations are promulgated. Seeds from cultivated specimens of threatened plant species are exempt from these prohibitions provided that their containers are marked "Of Cultivated Origin". Certain exceptions to the prohibitions apply to agents of the Service and State conservation agencies.

The Act and 50 CFR 17.62, 17.63, and 17.72 also provide for the issuance of permits to carry out otherwise prohibited activities involving endangered or threatened species under certain circumstances. Such permits are available for scientific purposes and to enhance the propagation or survival of the species. For threatened plants, permits are also available for botanical or horticultural exhibition, educational purposes, or special purposes consistent with the purpose of the Act. It is anticipated that few trade permits would ever be sought or issued because none of the four taxa are common in cultivation or in the wild.

It is the policy of the Service, published in the Federal Register on July 1, 1994 (59 FR 34272), to identify to the maximum extent practicable at the time a species is listed those activities that would or would not constitute a violation of section 9 of the Act. The intent of this policy is to increase public awareness of the effect of this listing on proposed and ongoing activities within the species' range. One of these four taxa (*Baccharis vanessae*) is known to occur on lands under the jurisdiction of the U.S. Forest Service and populations of the taxa may potentially be discovered on lands under the jurisdiction of the Department of Defense (Navy). Collection, damage or destruction of any of these species on Federal lands is prohibited, although in appropriate cases a Federal endangered species permit may be issued to allow collection. Such activities on non-Federal lands would constitute a violation of section 9 if conducted in knowing violation of State law or regulations or in violation of State criminal trespass law. The Service is not aware of any otherwise lawful activities being conducted or proposed by the public that will be affected by this listing and result in a violation of section 9.

Questions regarding whether specific activities will constitute a violation of section 9 should be directed to the Field Supervisor of the Service's Carlsbad Field Office (see ADDRESSES section). Requests for copies of the regulations concerning listed plants and general inquiries regarding prohibitions and permits may be addressed to the U.S. Fish and Wildlife Service, Ecological Services, Endangered Species Permits, 911 N.E. 11th Avenue, Portland, Oregon 97232-4181 (telephone 503/231-2063; facsimile 503/231-6243).

National Environmental Policy Act

The Fish and Wildlife Service has determined that Environmental Assessments and Environmental Impact Statements, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the Service's reasons for this determination was published in the Federal Register on October 25, 1983 (48 FR 49244).

References Cited

A complete list of all references cited herein is available upon request from the Carlsbad Field Office (see ADDRESSES section).

Author

The primary author of this final rule is Fred M. Roberts, Jr., Carlsbad Field Office (see ADDRESSES section).

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, and Transportation.

Regulation Promulgation

Accordingly, part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, is amended as set forth below:

PART 17-- [AMENDED]

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361-1407; 16 U.S.C. 1531-1544; 16 U.S.C. 4201-4245; Pub. L. 99-625, 100 Stat. 3500; unless otherwise noted.

2. Section 17.12(h) is amended by adding the following, in alphabetical order under FLOWERING PLANTS, to the List of Endangered and Threatened Plants, to read as follows:

Sec. 17.12 Endangered and threatened plants.

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(h) * * *

Species				Historic
range	Family	Status	When listed	Critical
Special	Scientific name	Common name		
habitat	rules			

FLOWERING PLANTS:

*	*	*	*	
Arctostaphylos glandulosa ssp. Mexico. Ericaceae.....	E	Del Mar manzanita...	U.S.A. (CA), 589	NA
NA		crassifolia.		
*	*	*	*	
Baccharis vanessae..... (CA).....	Asteraceae.....	Encinitas baccharis.	U.S.A. 589	
NA	NA	T		

*	*	*	*
*	*	*	*
Chorizanthe orcuttiana.....	Orcutt's spineflower	U.S.A.	
(CA)..... Polygonaceae.....	E		589
NA	NA		
	*	*	*
*	*	*	*
Verbesina dissita.....	Big-leaved crown-	U.S.A. (CA),	
Mexico. Asteraceae.....	T		589 NA
NA			
	beard.		
	*	*	*
*	*	*	*

Dated: September 27, 1996.
John G. Rogers,
Acting Director, Fish and Wildlife Service.
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